# BUSINESS WEEK

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INDEX

AGO

INDEX ON PAGE 22

Autos



Marcus of Neiman-Marcus: Running a store with a split personality (page 134)

A MCGRAW-HILL PUBLICATION

SEPT. 19, 1953

Now! each key (5) its own motor bar...

...saves up to 50% hand motion

# LIVE KEYBOARD National adding machine

Now, you can add and list without depressing a motor bar! On this new National every amount key is electrified! Simply press the keys you want to add—the machine does it instantly! You save up to 50% hand motion.

National's "feather-touch" action makes it easier than ever to press two or more keys at once—more time-saving! All ciphers print automatically—still more time saved! Operators like it—they do their work with so much less time and effort.

Printed words cannot explain all the advantages of this "Live" Keyboard. You must see it to believe it. See it today!

For demonstration phone the nearest National office or National dealer

"Live" Keybeard plus 8
other time-saving features combined only on
National: Automatic Clear
Signal \* Subtractions in red
\* Automatic Credit Belance
\* Automatic space-up of tape
when total prints \* Large
Answer Dials \* Easy-touch
Key Action \* Full-Visible
Keyboard, Automatic Ciphers
\* Rugged-Duty Construction.

now you can forget the motor bar!

National

THE NATIONAL CASH REGISTER COMPANY, DAYTON 9, OHIO





# From \$10 to 10 cents a daywhat can better rubber do for you?

A typical example of B. F. Goodrich improvement in rubber

THOSE pictures are of identical drives in the same plant. At left are ordinary V belts. Tension made them stretch out of shape so fast that \$75 of belts only lasted 7 days-over \$10 a day. Then B. F. Goodrich grommet belts were tried. They've lasted not 7 days, but more than two years! B. F. Goodrich tumbled belt costs from \$10 a day

Other B. F. Goodrich improvements are making important savings in hundreds of places. For instance, BFG has developed a radically new conveyor belt, called Griptop, that can carry packages, crates, all sorts of things, at steep angles never possible before, and so make substantial savings in space, equipment costs and time.

Still another example is B. F. Goodrich

Armorite, a special rubber so tough it handles rocks, gravel, other things that wear right through steel. Used as chute lining in a Pennsylvania coal mine, Armorite is still in service after 5 years while the steel plates previously used had to be replaced 2 and 3 times

Outlasting other rubber, other materials by many times, is nothing unusual for products improved by B. F. Goodrich research. The cord conveyor belt which can last 10 times longer is an example of this. And the Burstproof steam hose that protects workers from scalding and injury makes a saving in safety as well as money. To find out more about B. F. Goodrich moneysaving improvements and what they can do for you, send the coupon now

for free facts on those rubber products you use.

The B. F. Goodrich Company
Dept. M-97, Akron 18, Obio
I am interested in the products checked below
☐ V belts ☐ Rubber linings for tank
Other belts (name type)
Hose (name type)
Other rubber products (name type)
Send information by mail.
☐ Have a BFG distributor see me.
Name
Company
Address

# RUBBER FOR INDUSTRY



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DEPARTMENTS

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ADVERTISING & BUSINESS MANAGER Herman C. Sturm



BUSINESS WEEK . SEPT. 19 . NUMBER 1255



· Elwell-Parkers commonly give 15 to 20 years' service. The cost to maintain them is low. Thus they repay their cost many times over.

Firms throughout the world, whether they use one truck or a hundred, rely on Elwell-Parker's reputation for dependability and long life. They have continued to buy them year after year for more than forty years.

Such a reputation is only gained through the policy of "building up to quality-not down to price". There are cheaper trucks on the market, but dollar for dollar Elwell-Parkers are the best!

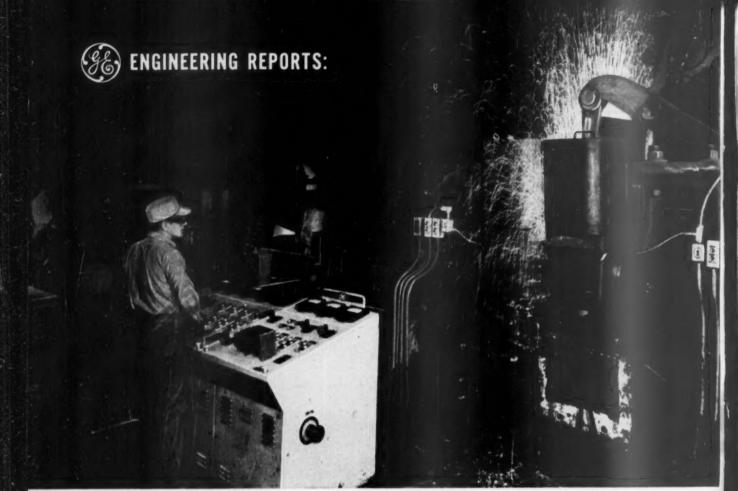
Look beyond first cost . . . buy trucks built to match the finest machines in your plant . . . buy Elwell-Parkers!

# FREE CATALOG

describes 80 or more E. P. models and their features. Write The Elwell-Parker Electric Co., 4010St. Clair Ave., Cleveland 3, O.



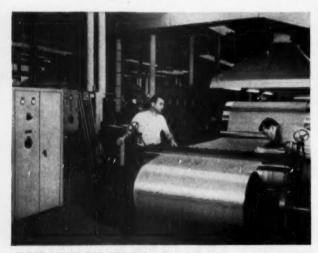
Since 1906



FASTER STEEL PROCESSING. G-E engineers helped increase strip output at Weirton Steel, division of National Steel, by applying

the first amplistat loop control for reliable control of steel strip in pickling tanks. Lines now deliver a more uniform product.

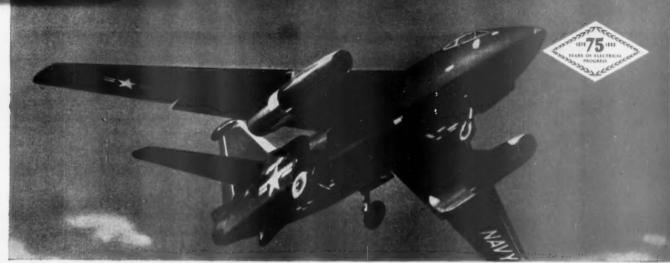
# Engineers amplify tiny signals to



MORE YARN PER BEAM is the result of automatic tension control. G-E engineers have installed an amplistat in the control system of a textile slasher drive, helped lower production costs.

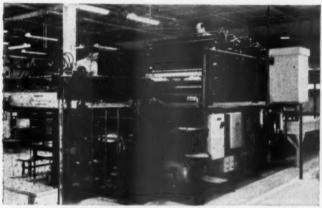


G-E ENGINEERS H. M. Ogle, General Engineering Laboratory, Dr. H. F. Storm, Industry Control, and W. L. Wilmer, printing application engineer, discuss some amplistats' uses in industry.



CLOSER AIRCRAFT CONTROL. To give added reliability to the Douglas A3D-1—U.S. Navy's most powerful attack plane—

G-E engineers have used amplistats in the electrical systems and to regulate speed and temperature of aircraft power plants.



GREATER PRINTING-PRESS OUTPUT. To simplify maintenance of press drives, G-E engineers often design amplistats into the control systems. The device also permits widest practical speed range on job runs.



MORE AUTOMATIC VOLTAGE CONTROL. G-E engineers applied amplistats in the voltage regulator system for this giant alternator, being positioned at a hydro-electric installation.

# harness America's giant equipment

# G-E engineers help you cut operating costs by using magnetic amplifiers in control systems

The amplistat is another example of how General Electric application engineers take advantage of new product and engineering developments to build dependable, sensitive electrical systems. This remarkably reliable and maintenance-free power-control device—a static, magnetic amplifier—was investigated by G-E engineers over 40 years ago. Today, using an improved amplistat, G-E engineers can instantly multiply a tiny control signal's strength as much as 1,000,000 times to make your heavy equipment work faster and more smoothly, with greater ease, safety, and economy.

For example, G-E engineers have used the amplistat to help maintain uniform tension of steel strip in rolling mills and processing equipment, simplify operation and maintenance of printing press drives, reduce maintenance on electrolytic cell lines in copper refineries, and to build more reliable control and regulating systems in modera military aircraft.

You can put this engineering skill to work for you by specifying "G.E." when you buy electrical systems. G.B. application engineers will draw on this engineering leadership in working closely with you and your consultants. Contact your local G-E Apparatus Sales Office early in the planning stage. General Electric Company, Schenectady 5, N. Y.

Engineering Leadership gives you better electrical systems from—





1915 Working with the U.S. Navy, Sperry developed first aerial torpedo whose course could be pre-set and held during prolonged flight with Sperry instruments. In early experiments, Lawrence Sperry (above), piloted torpedo to landings. Later models were radio controlled.

# PILOTLESS



1946 The WAC CORPORAL (in circle), developed by American military scientists for launching from a V-2 rocket, first used compact Sperry control mechanism to guide it.

# FLIGHT...

# another Sperry first... 1915

There's little physical resemblance between the first automatic aerial torpedo of World War I and the guided missiles of today. Yet both were made possible by the gyroscopic principles developed by Sperry.

When the automatic flying torpedo took to the air, it was kept on its predetermined course with a Sperry Automatic Pilot. Today, combined with radio, principles of those early flights are incorporated in the compact, sensitive Sperry controls that form the brains of supersonic rockets, experimental drone aircraft and guided missiles.

What new developments lie ahead in the field of pilotless flight? No one knows. But you can be sure of this—as improvement follows improvement, Sperry engineers will be applying the "know how" and experience acquired during more than 40 years of leadership in aviation.





1951 Sperry E-4 Automatic Pilot converted Lockheed jet fighter to automatically controlled drone, permitting, command from ground or from EDT-33 Director plane. Such robots served as targets in evaluating missiles and gathered data by penetrating atomic blasts.



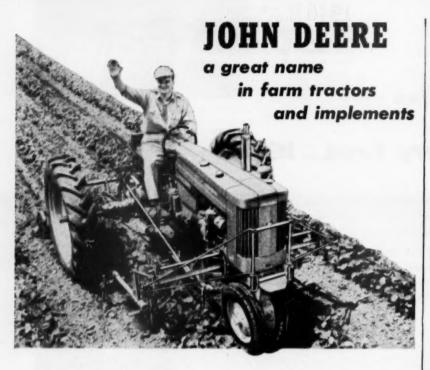
1953 Guided missiles, such as the Navy's Regulus, designed by Chance Vought, are directed in flight by Sperry controls combined with highly déveloped radio. From controls and guidance systems to complete "birds," Sperry is designing and producing missiles for the national defense.



19?? For as long as there is a need, Sperry's engineering, research, and manufacturing facilities are at the command of the Armed Forces. And through licensing arrangements, Sperry has been proud to share its developments with others — to give the Services more Sperry-designed equipment in the shortest possible time.







# relies on Dearborn for water treatment

At the John Deere Dubuque Tractor Works every attention is given to production and maintenance economies to provide the best possible products at the lowest cost. That's why this plant uses Dearborn Water Treatment and Engineering service to help maintain trouble-free boiler operation and power production. It's preventive maintenance at its best.

# WHY YOU CAN RELY ON Dearborn

Dearborn has specialized in the conditioning of water and the control of corrosion since 1887. This broad experience in water treatment and rust prevention-plus Dearborn's extensive laboratory and research facilities are at your service ... at no obligation. You'll find it will pay to...



COMBATTING CORROSION EVERYWHERE SINCE 1887

Dearborn Chemical Company, Merchandise Mart Plaza, Chicago 54, III.

# **READERS REPORT**

# Idealism not Ideology

Dear Sir:

Dr. Robert Lobstein, in Readers Report [BW-Jul.18'53,p8], suggests that our technical colleges and universities concentrate so intensely on scientific education that they spare "not a minute . . . for other purposes.'

. . . Dr. Benjamin Fine, of the New York Times, says "As recent spy trials have shown, a technically trained mind, no matter how brilliant, does not assure the nation of a loval, patriotic citizen. . . . A technical education is an asset in a world torn asunder with ideological conflict. But our nation cannot grow to its full potential stature unless and until our schools prepare their graduates to be educated Americans and

not just trained robots.

Nor is the debate new. In Newman's "Idea of a University" over 100 years ago, we see "Every art is improved by confining the professor of it to that single study. But although the art itself is advanced by this concentration of mind in its service, the individual who is confined to it goes back. The advantage of the community is nearly in an inverse ratio with his own." Also from the same book: ". . . a man who has been trained upon one subject or for one subject only, will never be a good judge even in that one."

WM. K. BAYER, JR.

OIL CITY, PA.

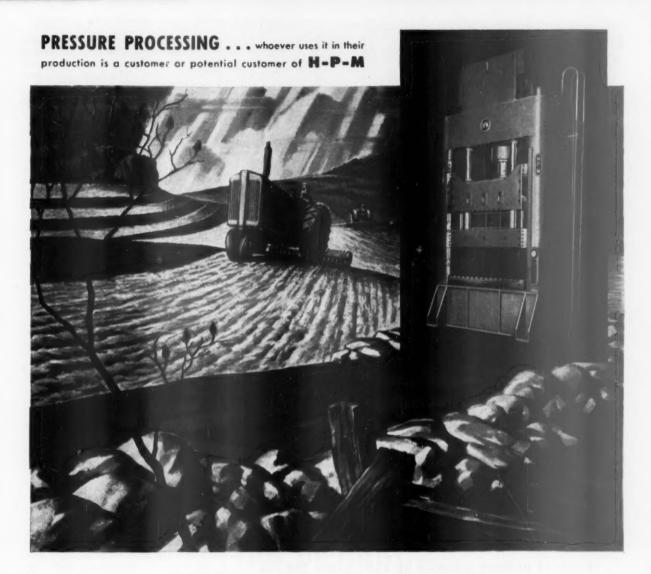
# Sharing the Credit

Dear Sir.

Your story about the recent Delaware statute relating to stock options, which appeared in your August 8 issue (page 99), speaks of me as co-author of the statute. I am deeply grateful for this mention. However, in addition to the Governor and the members of the Senate and the House of Representatives of the Delaware legislature, there are a number of others who played an important part and should be mentioned.

The legislation was in large part conceived by Ellsworth C. Alvord of the firm of Alvord & Alvord, tax attorneys, and Edwin D. Steel, Jr., a member of the Delaware Bar. Mr. Alvord, as former Chairman of the Tax Committee of the United States Chamber of Commerce, had taken part in the preparation of the provisions of the Revenue Act of 1950 relating to the tax status of employee stock options, and is concerned as a matter of public interest with employee stock options as an incentive.

. . . William S. Foulk, Chairman of



# AGRICULTURE...

... today is more vital than ever! America's appetite alone has increased by more than 6% million mouths since 1948.

To meet this demand, farm implement manufacturers—producing the machines that make life on the land easier and more productive—are helping farmers everywhere bring more food to market with less manpower. And, on the production lines of these leaders\* in the farm implement field, you'll find versatile, H-P-M All-Hydraulic presses handling a wide variety of pressure-processing jobs.

Pressure processing and H-P-M may also be able to play an important part in your production plans . . . so, make it a point to talk shop with an H-P-M engineer today!

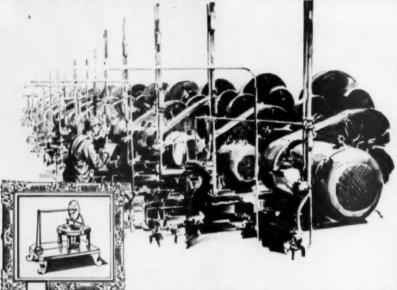
\*ALLIS-CHALMERS CATER-PILLAR TRACTOR INTER-NATIONAL HARVESTER J | CASE JOHN DEERE MASSEY-HARRIS, OLIVER AND OTHERS



# THE HYDRAULIC PRESS MFG. COMPANY

1000 MARION ROAD . MOUNT GILEAD, OHIO, U. S. A.

# DOW CORNING SILICONE NEWS



outgrown Mrs. Davenport's petticoat

Our dependence upon electricity has grown fast since 1837 when Tom Davenport used his wife's petticoat to insulate the first electric motor. Now electricity cooks and freezes for us; turns night to day. It carries sights and sounds through the air; drives the machines that make mass production possible.

But improvements in the insulating materials that harness electricity have lagged behind. The greatest single improvement came less than ten years ago when Dow Corning introduced the first silicone resins. Chemical cousins of glass, these resins complement glass cloth, mica and asbestos. They double the power per pound ratio in electric machines; multiply their life expectancy by ten. Here's a typical example of what that means. To increase output of chemicals, engineers

# rewound 31 motors with Silicone (Class H) Insulation: increased pumping capacity by 30%; saved \$50,000.

Rated at 50 and 60 hp, those motors were rebuilt with Class H insulation to deliver 75 to 90 hp. It would have cost \$68,200 to install new, conventional 75 hp motors. Rewinding cost only \$19,000. And failure rate on the old 50 and 60 hp motors was one a month, 48 failures in 4 years. Rewound with Class H insulation, those same motors have delivered at least 50% more power for 4 years with only 6 failures. Equally useful in the form of fluids, lubricants, protective coatings, water repellents and rubbery solids it will pay you to find out how

# Dow Corning Silicones Save Money, Increase Sales

mail this coupon today DOW CORNING CORPORATION Dept. E-S, Midland, Michigan Please send me Performance Data on Class H
Tall Tales to Fabulous Facts DOW CORNING Midland, Michigan CORPORATION Les Angeles New York (Address) Canada: Fiberglas Canada Ltd., Toronto

England: Midland Silicones Ltd., London

the Committee on General Corporation Law of the Delaware Bar Association, and the members of his committee, also took an essential and most constructive part in the legislation. . . .

V. HENRY ROTHSCHILD, II

NEW YORK, N. Y.

### Cattle Prices

Dear Sir:

There has been considerable loose talk around here about cattle prices. Your very fine article in the August 22 issue, page 82, would clear up a lot of

We should very much like to reproduce it. . . .

HENRY C. WOODYARD

WOODYARD, INC. SPENCER, W. VA.

# Family Pride

Dear Sir:

Your article, Routing Trains by Dial, 50 an Hour, on page 32 of your August 22 issue, implies that our British cousins have developed a new idea in employing sequence switches for railroad interlocking.

I should like to correct this possible misinterpretation by your readers. The industry in this country obtained U.S. patents on such a system in 1928. The idea was abandoned in favor of our NX (Entrance-Exit) Type of interlocking because of its comparative simplicity, flexibility, compactness, and ease of maintenance.

However, the control machine is only a small portion of the whole interlocking system, which includes machines for throwing switches, signals for transmitting information to enginemen, and relays for determining track conditions and indicating and checking the entire system through special circuiting.

This . . . is known as the safety circuit portion, and . . . the apparatus and engineering for this part of Gresham Interlocking was designed and furnished by the General Railway Signal Company.

A. E. HEIMBACH

EXECUTIVE VICE-PRESIDENT CENERAL RAILWAY SIGNAL CO. ROCHESTER, N. Y.

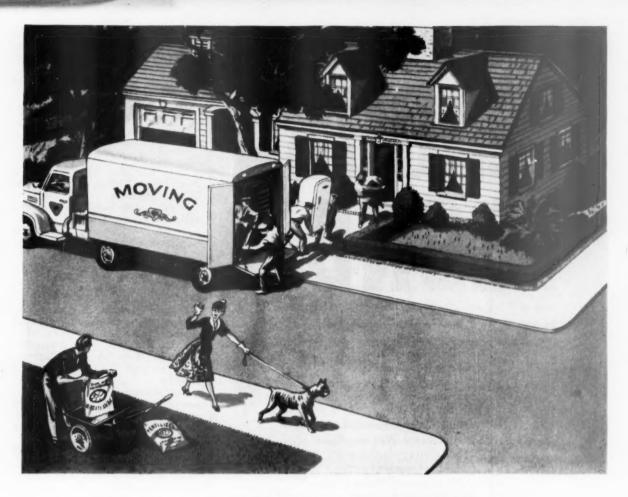
## One Basket

Dear Sir

The article on page 44 of your August 15 issue, entitled All in One Basket, has aroused considerable comment among our dealers and business associ-

Please don't let any reader believe that General Electric will really be "strictly alone in the field" by placing all their eggs in the packaged air conditioning basket. Our company has had

[City]



# How does NATURAL GAS fit into this picture?

Notice, first, the moving van which operates on Phillips Petroleum Company's propane fuel, extracted from raw natural gas. The van's tires have treads of Phillips-made synthetic rubber, manufactured in large part from natural gas feed streams. That new house has automatic water heating, refrigeration and cooking provided by natural gas which pipeline companies purchase from Phillips.

Notice, too, the man preparing to treat his

lawn with a mixed fertilizer, containing ammonia, nitric acid and sulfur, which Phillips makes from natural gas. And the woman's dress and stockings are of synthetic fibers whose manufacture requires chemicals made by Phillips from natural gas liquids.

Natural gas is one of the world's most versatile raw materials. Phillips Petroleum Company plays an important part in bringing its benefits to users everywhere.

# PHILLIPS PETROLEUM COMPANY

Bartlesville, Oklahoma

We Put the Power of Petroleum at America's Service



# America does business on

# NEKOOSA BOND



it pays to place with your printer

When specifying paper for letterheads, envelopes and business forms, remember these important facts:
Nekoosa Bond is one of the largest selling papers in the world... Nekoosa Bond has distinctive appearance, durability, printability... Nekoosa Bond offers the prestige of a famous watermark!
Nekoosa-Edwards Paper Company, Port Edwards, Wisconsin.



all its eggs in that basket for approximately seven years—in fact, the only products manufactured by this company are packaged air conditioning units....

Don V. Petrone

EXECUTIVE VICE-PRESIDENT TYPHOON AIR CONDITIONING CO., INC. BROOKLYN, N. Y.

## Rave Notice

Dear Sir:

I saw your piece, How Not to Use Psychological Testing, in the August 29 issue, page 156.

It was simply wonderful, and I am glad that somebody said it.

A. A. IMBERMAN

IMBERMAN & DEFOREST CHICAGO, ILL.

### Tell Us More

Dear Sir:

I would appreciate it if you would send me the address of the Research Council for Economic Security, which was mentioned in your story, Spot Lighting Off-the-Job Ills, which appeared on page 118 of your August 8 issue.

Our association is engaged with a new state committee in studying the problem of "cash sickness." We would like very much to have a copy of the report. . . .

ROBERT L. ROSE

EXECUTIVE SECRETARY
MINNESOTA EMPLOYERS ASSN.
SAINT PAUL. MINN.

• If you are also interested in the address of the Research Council for Economic Security, it is:

111 West Jackson Boulevard Chicago 4, Illinois (Gerhard Hirschfeld, Director)

# Still in Embryo

Dear Sir:

Your recent article on Sanborns in Mexico City [BW—Aug.1'53,p76], was read here with high interest. . . .

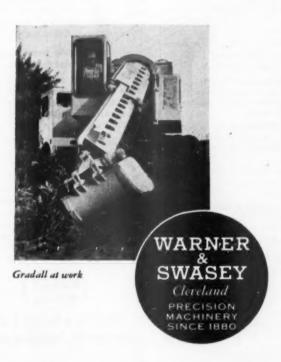
... However ... BUSINESS WEEK states the new Sanborns' store next door to the U.S. embassy has "just opened." Fact is, construction has only recently started on the building. It is only in its skeleton stage—so that it will be a number of months before the store can be opened. . . .

RICHARD H. SCHNEIDER WALGREEN DRUG STORES

CHICAGO, ILL.

Letters should be addressed to Readers Report Editor, BUSINESS WEEK, 330 West 42nd Street, New York 36, N. Y. If some of the rugged individualists, who risked and struggled to launch a business, had limited themselves in hours and effort the way some of their present employees do, the business would have died a-borning and the millions of jobs and good pay now being argued about would never have existed.

Instead, these men drove themselves day and night, built whole industries, making it possible for more people to enjoy more things. That they made money is only another proof that we are all paid out of—and only out of—what we add to the world's goods.



# The big question about truck tires

# All too often it isn't even asked!

#8 in a series of advertisements directed to every executive concerned with more efficient truck operation

Many tire buyers and tire salesmen are discount experts. The salesman operates by offering a "good deal on tires," and the buyer counters with, "I can get a better price somewhere else."

Then ensues a battle—not of wits, but of arithmetic.

The winner is determined by the amount of the discount finally agreed upon.

And strangely enough, when you consider the importance of tire costs to most truck operators—the big, basic question in any tire deal doesn't even enter into the discussion!

The buyer doesn't ask it.

And the seller doesn't volunteer the information.

### What is the question?

Ask yourself what you want—and pay for—in a truck tire and you can state the question yourself. "How many thousands of miles of dependable service can I expect from this tire?"

Obvious—yet you'd be amazed at the number of tire deals completed on the basis of price alone. As though all tires were exactly alike!

There is, of course, a big difference both in the function and quality of truck tires. For maximum economy you must have a tire that's job-designed—specifically built for the kind of roads, loads and speeds involved in your particular operation. And you

must have a quality-built tire, strong in every detail—with no "weak link" in material or design to cause premature failure.

This kind of tire could reduce your costs by as much as hundreds of dollars per truck per year. But how can you find it?

### The best answer

Look, not just for a "minus" in price, but for a "plus" in mileage. These new features of Kelly Truck Tires show you how you can get this extra mileage and they give you a sound basis for comparison of true tire values.

- ARMORUSEER TREAD—a new type, finer carbon black blended with rubber by Kelly's exclusive Armorubber process delivers extra thousands of miles!
- "EXTRA RECAP" BODY—newly perfected pre-stretched, stabilized cord greatly increases body strength and resistance to injury.
- NEW COOLER-RUNNING ply bonding and cushioning reduces costly heat buildup and tire fatigue.
- FLAT ROAD CONTOUR TREAD design puts more working rubber on road, improves mileage, safety.
- STRONGER BEADS—extra strength, accurately positioned, spiral wrapped beads anchor tire rigidly on rims, eliminate one common type of tire failure.

You can buy Kelly Tires with all these extra-mileage features at a more-thanfair price. These features positively insure you thousands of miles of extra service, plus extra recaps after original tread is gone. You can be sure that in terms of true tire value—cost-per-tire-mile—you'll be getting a real bargain!

Your Kelly Dealer is well qualified and equipped to help you make the most of this bargain. He can supply you with tires that are job-designed for your particular kind of operation. And he can help you set up a tire maintenance economy system that can literally multiply the life of your tires at no extracost to you! Ask him about it today.

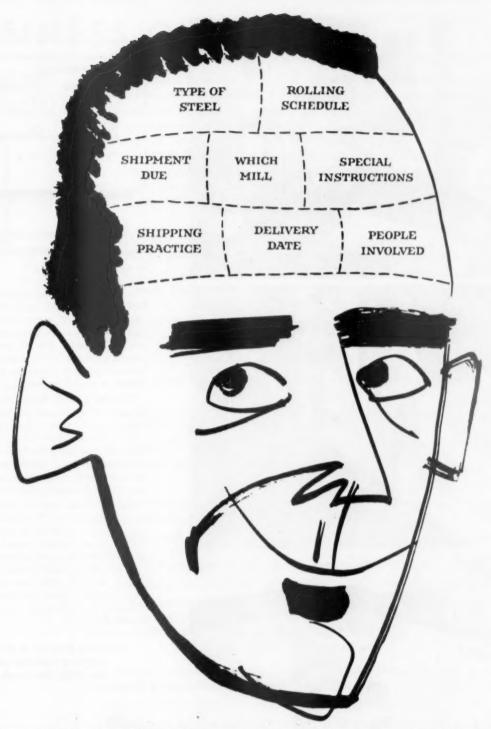
# Proof-from truckmen's

Here's the best possible kind of evidence that Kellys consistently deliver more miles for the money—actual tire performance records based on trucking operations of every size and type.

A sampling of these revealing case histories has been compiled in a booklet which tells you—without claims or "sell"—what kind of economies you can expect when you roll on Kellys. Also available at your request is a fact-full data booklet for truck operators. Information well worth having! Write for it today to: The Kelly-Springfield Tire Company, Cumberland; Maryland.



There's a tough Kelly for every trucking job!



Keeping your steel orders in mind is the full time job of your Inland serviceman. (For each Inland customer has his own serviceman.) From order to delivery he rides herd on your steel-always aware of your needs and preferences. And always keeping posted on production progress. In effect, he is your man at Inland.

INLAND STEEL COMPANY 38 South Dearborn Street, Chicago 3, Illinois



SALES OFFICES: Chicago . Milwaukee . St. Paul . Davenport . St. Louis . Kansas City . Indianapolis . Detroit . New York







PLUMBING ...
HEATING ... KITCHENS
Further examples of
AMERICAN-Standard
Leadership

# ... providing homes with added comfort and convenience in every room.

The observance of National Home Week, September 20 to 27, spotlights the unequalled comfort, convenience and efficiency of the modern American home . . . and the constant flow of new and improved products which make it so. An increasingly large role in this home development is played by American-Standard.

Whether it's new-design plumbing fixtures for the bathroom, work-saving cabinets for the kitchen, or modern hot water heating for the entire house, American-Standard products provide far more than the usual in smart design, quality construction, peak efficiency in service . . . and budget economy of operation.

But American-Standard is not content to rest with the best. It is constantly striving—through research, testing and proving—to make further contributions to more comfortable, more convenient living . . . to create products that are longer lasting, better looking and require less maintenance. American-Standard is proud of its leadership . . . intends to remain the leader.

American Radiator & Standard Sanitary Corporation, P. O. Box 1226, Pittsburgh 30, Pa.



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# BUSINESS OUTLOOK

BUSINESS WEEK SEPT. 19, 1953



You'll get a revealing glimpse of business conditions—the problems and the prospects—in Business Week's general news section this week.

Store sales are good and will stay good through Christmas (page 25); autos are set for stern competition now—and maybe a sales slump next year (page 27); steel pricing takes a sharp pencil (page 30); and petroleum faces oversupply after its long struggle to meet demand (page 32).

Perhaps these lines have fared a little better than average these last eight years; you may have no tears to shed for them. But you are exceptional if you don't see some of your own problems in theirs.

Retail trade is likely to show up better than extractive and processing industries for some time. (Blame heat for August's lag in stores.)

The advantage is in dealing direct with consumers. Their income is at record levels. They will be slow to feel the pressures that are becoming apparent in oil, metals, and manufacturing.

And, despite record consumer debt, the savers still are squirreling money away—and have unprecedented liquid assets to bulwark buying power.

Autos benefit from consumer prosperity—but may have borrowed a bit.

Past sales successes (including this year's fine record to date) naturally have put an end to new-car shortages. This may have dulled 1954 demand to a point where new models are not inordinately seductive.

Any dip in general business would sharpen these impacts.

Steel's pricing problem has aspects that are unique to steel, but it bolls down to a situation that's familiar throughout industry.

Supply finally is approaching balance with demand. Many steel users have built up stocks that are quite adequate. A few steel items—mostly in the specialty categories—actually are hard to sell.

That leaves steel salesmen and purchasing agents to battle it out.

Conversion deals, naturally, soon will be history. Premiums are being shaded—or abandoned. The buyer may even find that he no longer pays base price plus full freight if he buys from a distant mill.

Freight absorption probably faces no legal prohibition—so long as it represents a genuine effort to meet competition.

But it isn't the only way a steel salesman can favor buyers.

He doesn't have to exact the last penny listed in the extra book. And he can shade the base price—the familiar "concession" of prewar days.

Who can say whether a price is cut or freight absorbed?

You'll do a lot for a big customer. Keeping your volume up (and overhead down) can be far more important than the length of a freight haul.

Nonferrous metal people find no novelty in outright price cuts.

Lead (which had a price break and then a recovery) turned down the middle of this week. Zinc dropped 1/2 ¢ a lb. last week. Copper has held

# BUSINESS OUTLOOK (Continued)

BUSINESS WEEK SEPT. 19, 1953 better than expected—but you can hardly say it is more than steady.

All this at a time when use of these metals is at or near records.

Symptoms of the new downturn in lead prices appeared in the scrap market. Dealers were quick to sense that the price probably had hit its top; they began to sell scrap at a great rate.

In fact, the flow picked up so rapidly that charges were raised for processing scrap into metal in an effort to head off the rush.

Zinc producers have become increasingly distressed over dwindling order backlogs and rising stocks of refined metal.

You have to go back half a dozen years to find the smelters holding as much zinc as the 117,897 tons in their hands at the end of August. That compares with 87,000 tons at the turn of the year.

The order backlog last month was down to 33,000 tons compared with 54,500 as recently as last March. The present backlog, in fact, was just about half the size of August's domestic mine output.

Complicating everything, imports continue very sizable.

Things are tough enough in lead and zinc so that the running battle of the industry to stem imports took another turn this week.

A new National Lead & Zinc Committee descended on Washington. Its demand: Relief as a "hardship" case under the "escape clause" of the Reciprocal Trade Agreements Act.

Mines progressively have been closing due to low prices and high costs. Wages in some mines are tied to prices, but generally they are inflexible.

# Copper's relative steadiness is, at best, an uneasy state.

Chile's very substantial output has been held off the market for a good while because the asking price was 6¢ a lb. or more out of line with the world market. This stock now totals around 100,000 tons.

Once that is sold (perhaps to the U.S. stockpile), Chile will come back in at the world price—which now shades New York quotations.

Nobody will predict price stability when Chile resumes shipments.

Aluminum has enjoyed greater price stability than other major nonferrous metals because it has been cheaper (weight-to-volume considered).

Production so far this year has been smashing records right and left.

But zinc's price drop certainly brings it back into a positior to compete with aluminum in more or less interchangeable uses. In fact, in autos, there's a real dogfight between aluminum, zinc, and stainless steel.

Tin has run into trouble due to (1) lighter coating of tinplate in the electrolytic process, and (2) some temporary overproduction of tinplate.

Meanwhile, the prediction of one tin expert, C. A. Ilgenfritz of U.S. Steel, is that "world consumption, under normal conditions, will continue trending toward lower levels." He also expects lower tinplate production in this country over the next few months.

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# Satisfaction rests on the carton



from retailers and distributors. Less home office handling. Fewer adjustment hours for route man. Less
write-off of merchandise. These are among the reasons why Brillo Manufacturing Company, Inc.
and other trade-conscious manufacturers have selected Union as one of their

major suppliers of corrugated boxes.

INTEGRATED



CORRUGATED CONTAINER DIVISION • Box Plants: Savannah, Ga., Trenton, N. J., Chicago, Ill. Eastern Division Sales Offices: 1400 E. State St., Trenton 9, N. J. • Southern Division Sales Offices: P.O. Box 570, Savannah, Ga. Western Division Sales Offices: 4545 West Palmer, Chicago 39, Ill. • Executive Offices: Woolworth Bldg., New York 7, N. Y.

# FIGURES OF THE WEEK

1923-25=100			. 19	23-25=1	00-1
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	§ Latest	Preceding	Month	Year	1946
Business Week Index (above)	. *255.3	†255.4	259.2	246.0	173.
PRODUCTION					
Steel ingot production (thousands of tons).  Production of automobiles and trucks.  Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands).  Electric power output (millions of kilowatt-hours).  Crude oil and condensate production (daily av., thousands of bbls.).  Bituminous coal production (daily average, thousands of tons).	122,497 \$43,029 7,963 6,506	†2,011 †132,574 \$44,495 8,694 6,534 †1,624	2,162 156,526 \$49,765 8,514 6,595 1,561	2,121 137,295 \$42,998 7,654 6,461 1,825	1,281 62,886 \$17,083 4,238 4,751 1,745
TRADE					
Carloadings: manufactures, misc., and l.c.l. (daily av., thousands of cars).  Carloadings: all other (daily av., thousands of cars).  Department store sales (change from same week of preceding year).  Business failures (Dun and Bradstreet, number).	None	78 59 -9% 178	74 57 +2% 150	78 61 -1% 91	+30% 22
PRICES					
Spot commodities, daily index (Moody's Dec. 31, 1931 = 100). Industrial raw materials, daily index (U. S. BLS, 1947-49 = 100). Foodstufts, daily index (U. S. BLS, 1947-49 = 100). Finished steel, index (U. S. BLS, 1947-49 = 100). Scrap steel composite (Iron Age, ton). Copper (electrolytic, Connecticut Valley, E&MJ, lb.). Wheat (No. 2, hard and dark hard winter, Kansas City, bu.). Cotton, daily price (middling, ten designated markets, lb.). Wool tops (Boston, lb.).	84.9 98.6 141.7 \$37.17 29.985¢ \$2.26 32.83¢	415.5 86.0 96.3 141.7 \$38.67 29.969¢ †\$2.20 32.89¢ N.A.	420.6 85.7 92.9 141.7 \$43.17 29.790¢ \$2.12 32.85¢ \$2.12	425.4 97.6 91.2 130.8 ° * \$42.00 24.500¢ \$2.41 38.87¢ \$2.00	311.5 † †73.2 † †75 † †76 \$20.27 14.045- \$1.97 30.56- \$1.51
FINANCE					
90 stocks, price index (Standard & Poor's)	3.88%	187.3 3.88% 21%	194.9 3.85% 2½%	195.3 3.52% 21-21%	135.7 3.05% 4-1%
BANKING (Millions of dollars)					
Demand deposits adjusted, reporting member banks.  Total loans and investments, reporting member banks.  Commercial and agricultural loans, reporting member banks.  U. S. gov't guaranteed obligations held, reporting member banks.  Total federal reserve eredit outstanding.	79,138 22,957 31,512	†53,059 †79,385 †22,965 †31,797 26,071	53,189 79,814 22,912 32,333 26,352	53,634 76,250 21,419 32,223 24,872	††45,820 ††72,030 ††9,299 ††49,879 23,883
MONTHLY FIGURES OF THE WEEK		Latest Month	Preceding Month	Year Ago	1946 Average
Wholesale prices (U. S. BLS, 1947-49 = 100). Augus Housing starts (in thousands). Augus Bank debits (in millions). Augus	t	110.6 94.0	110.9 96.0 \$148,128	112.2 99.1 \$122,220	78.5 55.5 \$85,57
Preliminary, week ended Sept. 12, 1953. * Revised.	4Not availab	Week" on ca	ich series on	request.	

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# **REM-CRU TITANIUM**

# Metal with a future

M ORE AND MORE manufacturers are discovering applications where Rem-Cru titanium solves corrosion or weight reduction problems as no other structural metal can.

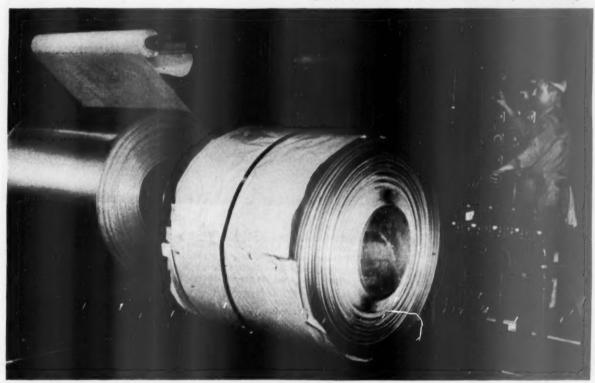
In the aircraft industry, for example, compressor wheels, blades and other vital parts for jet engines are forged from titanium. Fuselage structural members, firewalls and shrouds for the latest airplanes are formed from titanium sheet. Rem-Cru titanium parts can be made 40% lighter than comparable parts of stainless steel . . . and equally as strong.

And in the chemical processing industry Rem-Cru titanium's outstanding corrosion resistance makes it the ideal choice for many types of equipment. The use of titanium not only eliminates costly down-time, but its resistance to attack prevents contamination of the chemical solutions being processed.

Hundreds of new industrial uses are being explored and developed. Expanding titanium production will make increasing quantities of this versatile new metal available at steadily decreasing prices. Rem-Cru is now producing titanium bars, plates, sheet, strip, wire, tubing, forgings and billets on a tonnage basis, from ingots weighing up to 4,000 pounds.

Military requirements still have first call on our production, but limited amounts of Rem-Cru titanium are available for industrial applications. Let us work with you in developing uses for titanium that will improve your product or processing operations.

9,000 lb.-38" wide coil of Rem-Cru titanium roady for cold rolling



REM-CRU TITANIUM

REM-CRU TITANIUM, INC., MIDLAND, PENNSYLVANIA

# You expect the best value from G-E fluorescent lamps



Silicone coat on new G-E Rapid Start lamps helps them start quicker Moisture in the air can make a fluorescent lamp slow to start. The wet film that condenses on the lamp is a good enough conductor to detour some of the electricity needed for proper starting.

General Electric has tailored a "raincoat" that stops this. It's made of silicone and breaks up the wet film into tiny droplets, leaving dry areas that interrupt the electrical contact. Less current is stolen. Starting is quicker, surer.

We call the coating Dri-Film\*. The photo above shows the difference it makes. Moisture breaks up into drop-

lets on the Dri-Film\* lamp, forms a smooth coating on the ordinary lamp.

You get Dri-Film\* on G-E Rapid Start lamps. It's invisible, won't rub off, helps assure you all the light you pay for. Many leading manufacturers have designed lighting fixtures to use Rapid Start lamps and their special Rapid Start ballasts. You expect the best value from G-E fluorescent lamps. Here's another reason you can.

For more information, write General Electric, Department 166-BW-8, Nela Park, Cleveland 12, Ohio.

Reg. U. S. Pat. Off.

You can put your confidence in-



# Retail Sales: A Well-Mannered Boom

The consumer is still buying plenty—but he's not on a spree. Sales have climbed slowly and calmly since last year.

It's hard to describe accurately. Maybe you'd want to call it a selling boom—which it is, in terms of volume. But the word "boom" implies a certain amount of drunken exhilaration, a certain amount of frantic rushing around by buyers and sellers alike. There's

none of that today.

True, consumers are spending their heads off. Their wages and salaries are high; their discretionary spending power is high; their interest in dressing themselves well and furnishing their homes attractively is keen. But when they go to the stores, they don't run; they walk. They shop around for a long time before they decide which dress or which refrigerator they want to buy. They're choosy about price, quality, appearance. There's no trace of the electric psychological atmosphere that marked—say—the buying spree of late 1950, right after the war broke out in Korea.

All of which makes up a strange phenomenon—a boom that isn't a boom. It has been sustained so steadily, and for so long, that it now has the appearance of humdrum normality. Talking to retailers across the country this week, business week reporters heard the same reaction: "Sure, maybe this is the best year I've ever had. Maybe fall and Christmas business will set a record. But I can't get excited about it. It'll only be a couple of percentage points better than last year."

• High Plateau—If you persuade a re-

• High Plateau—If you persuade a retailer to take a detached view of the situation, however, he'll admit that the year has been really good. He'll also tell you that—as is traditionally the case-bor Day, and should continue high through the Christmas selling season.

Most parts of the country report sales this year have ranged from 1% to 5% better than those of last year. The average merchant expects the same pattern to hold through the end of the year. "We look for a fourth quarter even with last year to 5% ahead," says a Chicago woman's shop. Narrowing the prediction down a little, the store adds: "Actually, we're shooting for a 1% increase."

That single percentage point doesn't sound like very much-especially when you cast back to the wild days of 1950 and early 1951. In those times, year-to-year sales volume increases of 5% were sneered at. But today's smaller changes carry a compensating advantage: "Things have settled down," says a midwestern department store executive. "You can look a couple of months ahead and see where you'll be."

• Steady Buyer-Not only is the consumer buying more steadily and more calmly; he is paying more and more attention to the value of what he is getting for his money. In general, he's getting more interested in higher-priced, higher-quality merchandise.

Retailers figure this reflects not only the consumer's sustained high income, but his new steadiness as well. Though he'll jump at a good bargain, he's not likely to make a buying decision merely on the basis of price. A retailer in Cleveland says this trend is particularly strong among younger people—unmarried working girls, for instance, who now buy fewer but better clothes.

• Credit—This interest in quality rather than price may have something



Curtis W. McGraw

VERYBODY who knows BUSI-NESS WEEK has known Curtis W. McGraw, president and chairman of the board of the Mc-Graw-Hill Publishing Co., Inc. The enduring mark of his leadership in the task of keeping business well-informed, shaping the technical development of industry, and holding the nation to an awareness of its power for greatness and goodness must remain on these pages. But it is something out of the lives of all of us that he died last week.

Associated with the company since 1920, when he joined the McGraw-Hill Book Co., a McGraw-Hill subsidiary, he was vice-president, treasurer, and director of the book company from 1927 to 1950. He became vice-president and treasurer of the McGraw-Hill Publishing Co. in 1943, and in February, 1950, was elected president and chairman of the board.

Curtis McGraw was the third son of the late James H. McGraw, Sr., founder of the publishing company, and of Mrs. Mildred Whittlesey McGraw of Madison, N. J., who survives him. His wife, the former Elizabeth Woodwell of Princeton, a daughter, Mrs. James L. Stoltzfus of Lake Forest, Ill., and three brothers, Harold W. McGraw, James H. McGraw, Jr., and Donald C. McGraw, also survive. D. C. McGraw is vice-president of McGraw-Hill Publishing Co.

to do with increased demands for credit. Where a family might have bought a \$150 sofa before and paid cash for it, the same family today would prefer to buy a \$250 sofa on time. Stores all over the country report a big jump in the number of requests for installment

paying arrangements.

But few stores are granting all the requests. "We're screening them carefully," says one appliance store owner. "It's bad policy to let your balance of cash sales fall too low." He speaks for cash sales fall too low." He speaks for the majority of retailers, and for the majority of banks, too. Banks are getting so choosy, one St. Louis merchant says, that they're refusing to buy accounts they would have approved without investigation last year.

That particular merchant depends heavily on credit sales to maintain his business, and-quite naturally-he's critical of the banks' tight policy. But other retailers figure the banks are playing it smart. Economic prospects for 1954 are hazy, to say the least; the more spot cash transactions you can make, the safer you'll feel. Furthermore, there are indications that the individual consumer may already have taken on too heavy a load of debt. Installment merchandising houses in Philadelphia say that unpaid bill balances have jumped alarmingly since the beginning of the year.

This doesn't mean that the consumer has fallen on hard times. It's probably just one more manifestation of the long-continued boom. The consumer gets so used to good times, sees so many of his acquaintances riding around in new cars and refurnishing their houses, that-as one observer puts it-"his ideas are always one jump ahead of his

· Inventories-The consumer's eager ideas may mean extra work for a store's credit department, but they're pure music to the executive charged with inventory. Except in a few isolated cases, stores throughout the country are gloating over a "very comfortable" inventory position. Major department stores in Chicago, for instance, all say their inventories are below those of last year at this time, and strictly in line with sales. Says a Houston department store executive: "It's what we've been praying for."

This lightness of inventory is due partly to the consumer's steady buying, partly to the steady output of manufacturers. There's no shortage of merchandise, a Pittsburgh retailer says; hence, there's no need to lay in heavy stocks. "Distributors have the goods," an appliance store president agrees. "Why should I stock up and take the risks?"

· Clouds-There are some dark spots in this otherwise bright picture. Certain fields of retailing have been having trouble-and expect the trouble to con-

Take major appliances, for instanceprobably the most unhappy of fields right now. These big items-refrigerators, stoves, washing machines—are sold largely on credit, and credit is tight. Further, dealers complain, manufac-turers have established too many outlets in each area. Even though over-all sales may be moderately good, each individual dealer is likely to find his share of the profits immoderately small. One dealer in Los Angeles says his June, July, and August business this year was 30% below last year's business in that period. His is an unusually dismal story, but few appliance dealers would scoff at it.

Tight credit is also bothering furniture dealers a little. Indirectly, it may catch up with other fields in the near future. Because of tight money, builders are finding it harder to sell houses (page 190). And a house is, in itself, a market for all sorts of goods-from rugs to chandeliers. Savs a St. Louis retailer dolefully: "If the government doesn't do something about the loan situation, business is going to be hurt." • The Future-Retailers think they can see pretty well to the end of this year.

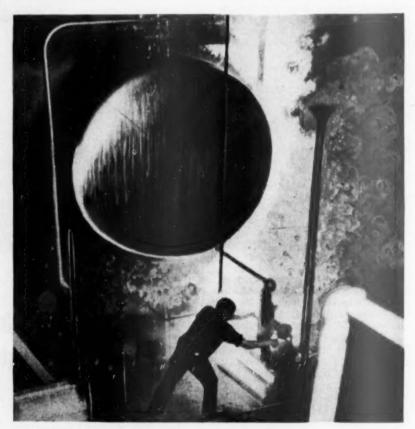
Business will be the same as, or a little better than, last year's. They expect the usual fall pickup, perhaps a small drop in November, the usual Christmas splurge.

There they stop. Like almost all businessmen, they're afraid to make any predictions-or place any large bets

on 1954.

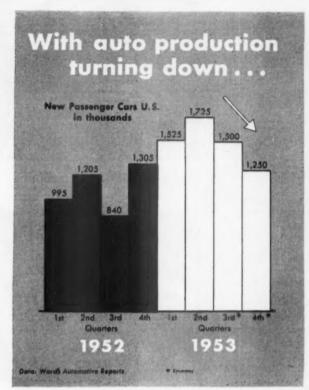
Several factors could combine to make retailing a less cheerful business in 1954 than it has been this year. Cutbacks in government defense spending could mean big-scale lavoffs-or, at best, a drop in overtime pay for thousands of workers. This would mean fewer people in the stores, with less money to spend. Rising freight rates, rising labor and materials costs, a possible federal sales tax could all combine to give a big boost to retail prices. And on top of all that could come a recession, an end to the boom.

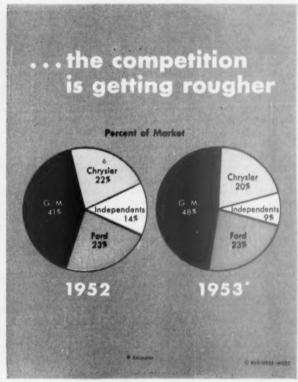
Most retailers expect to have a merry Christmas-if they can keep from worrying about the future.



# A Man Pits Himself Against a Fire

In the explosion shaken and fireswept plant of Shell Chemical Corp. at Martinez, Calif., safety engineer Farmer Boyd risks his neck to cut the flow of alcohol feeding the flames that broke out after a leak in a batch kettle set off a blast Sept. 12.





# Car Makers Gird for Battle

If it's true that your average auto manufacturer loves a fight, the new selling season is made to his order.

As the chart above shows, present indications are that General Motors this year will regain its prewar share of the market—the 48% that new president Harlow Curtice set his sights on early this year (BW—Mar.21'53,p92). Caught in the squeeze are not only the independents, but even another Big Three member, Chrysler. Next year the pressure of GM and Ford will be greater.

New models will be rolled into show windows in the coming months, beginning with Hudson next week, and as they go motor men will be sharpening competitive knives to slice into what they admit will be a smaller pie. • Troubles-There has been a variety of troubles in the auto industry this vear to account for the tailing off of production shown in the chart. But even so, the industry will wind up 1953 with the second biggest production year in its history-about 6-million cars compared with 1950's 6.6-million. As it looks now, the industry won't have it so good again for a long time.

Last winter the motor makers called the turn on the 6-million output, and they have a standing gripe against outside predictions of a smaller market. But even they are lowering their sights for the period just ahead. General Motors officials are now forecasting average annual car sales through 1960 of at least 5-million. Thomas J. O'Neil, Ford's director of product sales and dealer organization planning, expects annual average production to exceed 5,520,000 over the next decade.

 Outsider's View—This time observers outside Detroit take little exception to the industry's projection of 5-million cars annually—provided that production is averaged out over a long period. But non-Detroiters make an important reservation about the period immediately ahead.

Seasoned economic observers, feeling that the national economy may soften in 1954, have a hunch that new car sales could plummet toward the 4-million mark. One thing they are watching is the used car market (page 88) which is getting back to "normal" with a vengeance.

That's why the competition is going to get rougher. Around Detroit, automen say the long-awaited "truly competitive" period has arrived. And they think it's healthy. They are not taken by surprise; that's shown in the way they have been preparing 1954 cars and sales efforts.

· New Models-As model changes go,

the new lines will have more than the usual annual quota of major body changes. Over the course of next year and 1955, nearly every company is expected to introduce either new bodies or engines, or both. Here's the way the 1954 models shape up:

Chrysler—Interiors of all Chrysler lines will be much more luxurious than in the past. Stylewise, major changes are not expected until 1955. However, Dodge, along with Plymouth, is returning to greater length, getting away from the "shorter on the outside, longer on the inside" keynote of a year ago.

In the case of Plymouth this is probably aimed at the "big car look" appeal of Chevrolet and Ford. Plymouth has a new engine coming up, but it probably will have to wait for the 1955 model.

The 1954 Chrysler will have more horsepower. Expectations are that it will rate at about 235 hp. (compared with 180 hp. for 1953 New Yorkers and Imperials). Chrysler long ago demonstrated that it could boost the engine's power to 400 hp. or better, but also gave notice that it does not wish to engage in any horsepower race which might stir up charges that the company is ignoring safety.

The new Plymouths and Dodges should be on public display by late

next month; Chrysler will come along later. Next week, the two Chrysler plants in Detroit will reopen after a two-week shutdown, and continue production of 1953 models. The plants have had to stretch out production due to a 40-day tool and die shop strike and, some reports say, slackening sales.

Ford—The big change in this company's line will be more power, with style revamping most likely put off until 1955 models. Mercury and Ford V-8s will jump about 20 hp. over the present 125 hp. and 110 hp. Lincoln will go up from 205 hp. to about 245 hp. Within two years Lincoln will introduce a new transmission, patterned after the Fordomatic and Merc-O-Matic.

The famous Lincoln Continental, still regarded by many as the most beautiful car ever produced by an American manufacturer, will be revived in 1954 in limited quantity.

All three Ford lines are good bets to show on the road in December, although Lincoln may be hampered by transmission shortages resulting from the GM Livonia fire (BW-Aug.22'53, p28). Lincoln had run out of Hydra-Matics by last week and had shut down. GM is expected to resume shipments of transmission in October, but the transmission would have to be scheduled for 1954 models, so Lincoln may have produced its last 1953 car.

General Motors—Three GM cars will have new bodies; another will have a new engine. Cadillac, Oldsmobile, and Buick will all adapt some of the features of the experimental and sports cars put on display early this year.

Oldsmobile is expected to make the widest departure in styling. Reports are that the body will be as much as eight inches lower. A wrap-around windshield with corner posts set farther back is expected.

Cadillac will install some features of its El Dorado and LeMans—a larger windshield curved back more emphatically, a grille with many more chrome separations than at present, and larger bodies. Horsepower will go up to match Chrysler.

Buick's body also will be new, but details have been closely guarded. The rear fenderlines are expected to be raised and the grille will probably be more oval in shape and honevcombed. The V-8 engine introduced on the two top lines in 1953 probably will be used also in the Special.

Pontiac will be out with a new V-8 engine developing around 150 hp. Stylewise, the cars will be little changed.

Chevrolet also is standing pat on its style, which was new with the 1953 line. It was expected that Chevvy would have its new engine ready for the 1954 market, but if it comes at all now it will be only in the last half of the year. It's a better bet for the 1955 models.

The success of Chevrolet's Bel Air luxury series introduced in 1953, will prompt both Ford and Plymouth to bring out competitive "super de luxe"

The new GM cars should be in the show rooms in December and early Ianuary.

Hudson—This starts off the 1954 parade. There is no radical styling change in the line, although alteration is extensive enough to be distinguishable. The Wasp and Hornet lines have picked up some style features from the smaller Jet models—a single horizontal bar, flattened rear deck, raised fender lines breaking abruptly at the rear.

Kaiser-Willys-Consolidation of the two companies is still going; consequently they probably will be the last to introduce new models. Changes in 1954 will be slight, but look for new styling and a consolidated "one-company" line in 1955.

Nash—The new car is scheduled to be out in November. There will be no major changes, although the grillework will not be so prominent and will be tucked farther back under the hood.

Packard—The 1954 models will be shown shortly after the first of the year. No significant changes in appearance are expected until 1955, but horse-power seems certain to rise to at least 200. Packard's up-and-coming new president, James J. Nance, has been unhappy about his car's styling in recent years and is determined to recapture Packard's prestige of other years. The figures don't show it, but he seems to be succeeding.

Studebaker—This company will stay pretty much with the distinctive lines it developed for 1953 cars, but probably will broaden its line by reinstalling a convertible. President Harold S. Vance makes no bones of the fact that sales are off. Studebaker cut its production one-third and laid off approximately one-third of its estimated 18,000 cm-ployees because, Vance says, "we want to decrease the number of cars in dealers' hands."

Vance's is the one bearish growl heard in Detroit in recent weeks, but, significantly, it's the voice of an independent. The independents are the ones taking the biggest beating in the present competitive scramble (chart, page 27). And it's likely to get worse.

For the big fight shaping up is between GM-more particularly the Chevrolet division-and Ford.

Ford, of course, has never made any secret of the fact that its sole ambition is to pass Chevrolet. Before its expansion and modernization of production facilities ends, it will have plowed about \$1.5-billion into an effort to match Chevrolet's capacity.

The struggle between those two will put the real squeeze on independents.



Blast smashed 62 automobiles...



...killed one person, injured 62...



... tore up 3/4 mi. of paving ...



Repairs: a 168-hr. week.



EXPLODING GAS tossed car and huge slab of concrete roadbed against a bus on jammed main street at rush hour . . .

# When Cleveland's Sewer Blew Up

Experts from the Ohio Dept. of Mines and a special committee of engineers were sniffing around shattered pipes and paving this week to find the cause of the sewer blast that smashed a busy Cleveland street just at the rush hour, killing one person and injuring 62.

So far, just about everyone is offering his own explanation. Those getting most credence are:  Gas leaked into the sewer from the old natural gas wells that dot the area, was set off by a spark.

• Industrial waste, dumped into the sewer, was ignited.

 Sewer gas, accumulated in the pipes, let go.

What was certain was that the explosion did some \$5-million worth of damage, tearing up \$\frac{1}{2}\$ of a mi. of paving on heavily traveled West 117th St.

Throngs of homeward bound drivers the time was 5:15 p.m.—found themselves being bounced around in a swirl of flying bricks, concrete, and manhole covers.

With the shattered sewers offering a serious health threat, Mayor Thomas A. Burke used emergency powers to put four contracting companies to work on a 24-hour, seven-day week repairing the damage—on a cost plus basis.

# Will Steel Mills Pay the Freight?

During the past five years of tight supply, steel users have willingly paid shipping costs from the mills.

Now that steel is easier to get, users can buy most of what they want from mills close to them.

To keep far-away customers, big mills would like to absorb freight costs. The hitch: Such a scheme might run into legal trouble.

Steel costs less today than it did only a few weeks ago-for the big user at least. Barring a war, it will get cheaper still in the future.

Behind this steady drop is the fact that demand is gradually sliding down to a level with supply. And arising from the changing supply-demand balance are three specific developments:

• Premium-price producers are lowering their charges almost weekly. These producers are generally small or remote mills. They've been able to ask high prices, and get them, for years—steel has been that tight. Now, premium-price steel is being shunned.

• Conversion deals are just about a thing of the past. Not often any more will a hard-pressed user—ready to do almost anything to get hold of some steel—scramble to buy ingots from one producer for finishing by another. Things are back to normal today. The user buys his finished steel straight from a single producer.

• And now, the steel industry is thinking about freight equalization whereby the producer, not the purchaser pays freight costs on the finished steel. This is the next great hope for lower steel costs to the user.

• Turnabout—The problem of freight costs is built into the very nature of the steel industry. It's largely a matter of geography.

There are steel using areas, and there are steel producing areas. You'll look far before you find an area that maintains an exact balance between production and use—an area that both (1) produces all the steel it needs, and (2) uses all the steel it produces. Most areas are weighted heavily on one or the other side of the scale. The Pittsburgh region, for instance, is a surplus area; it produces more than it uses. Chicago is a deficit area; it uses more than it produces.

Hence, steel has to travel. And here's where the problem of freight costs rears its head.

 Who Pays?—Say a washing machine manufacturer in Chicago needs some steel. Knowing he'll have to pay freight costs, he'd naturally prefer to do business with a Chicago mill. Only if the Chicago mills are already swamped or for some other reas n can't handle his order, and only if he's in bad need of steel, will he turn to Pittsburgh.

In the decade just passed, he has turned to Pittsburgh many times. He has accepted the higher freight costs as the lesser of two evils—the other being the prospect of going without steel.

Now, things have changed. Steel is a good deal easier to get. The Pittsburgh mills are beginning to see fewer of the washing machine company's orders.

What can the Pittsburgh mills do about it? They can offer to pay all or part of the Pittsburgh-Chicago freight costs, thus equalizing their prices with those of the Chicago mills.

 Legal Morass—On the face of it, that sounds like a pretty straightforward solution. It probably would be—except that the whole idea of freight equalization is sunk in a morass of legal doubts and technicalities.

Government antitrusters in the past have outlawed two other steel industry systems for getting around the freight problem. The present idea of freight equalization is distinct from these other systems—which is why steelmen think it can escape the same fate. Its predecessors:

Pittsburgh-plus pricing flourished until the mid-1920s. It was an industry-wide system whereby steel delivered from anywhere in the U.S. was priced as though it had been delivered from Pittsburgh. Thus, a Chicago user, buying from a Chicago mill, would pay a "plus" charge corresponding to what it would have cost to transport the steel from Pittsburgh. Where this plus was more than the freight actually paid on the particular shipment it gave rise to "phantom freight."

Multiple basing point pricing took hold in the mid-1920s and flourished until 1948, when it was outlawed. Essentially, it was a refinement of the Pittsburgh-plus system. Each major steel producing area had a "basing

point"-often a large mill in the areathat acted much as Pittsburgh had acted in the earlier system. Steel shipped from anywhere in the area was priced as though freighted from the basing point.

the basing point.

This led to some strange pricing practices—none of which sat well with the Federal Trade Commission. The similarity of prices charged by different steel producing districts for delivery in each consumption area, FTC said, indicated collusion.

While FTC was worrying about the steel industry, it was actively building up a case against cement producers on similar grounds. Both FTC and the Dept. of Justice filed suit against the cement men, charging that their basing point pricing system violated the antitrust laws. The Supreme Court agreed, outlawed the system in the cement industry in 1947. A year later, steelmen were prodded into dropping their own system.

• A Difference—By that year—1948—there was no more need for any such price-fixing device. Steel was so scarce that it could be sold on an "f. o. b. mill" basis. But now, the need exists again. Hence the talk about freight equalization.

This system, if adopted, will be very much different from the illegal basing point device. To be entirely accurate, you won't even be able to call it a system. There'll be no getting-together of mills to set up a price schedule. Each mill will arrange its own equalization affairs, on an order-by-order basis.

Thus, a Pittsburgh mill might arrange to pay freight costs for a Chicago steel buyer. In doing so, the Pittsburgh mill is not conspiring with other mills to avoid competition. It's competing on its own.

• One More River—Is the idea immune to legal troubles, then? Steelmakers aren't quite sure.

No U.S. court has ever specifically outlawed freight equalization. On the other hand, there's nothing specific on the law books that says it's legal. This lack of concrete legislation is making the steel industry hesitate before putting its new device into action.

It's possible, steelmen figure, that freight equalization could run into charges of price discrimination. Different steel users would be paying different prices to the same mill, depending on each user's location and his nearness to competing mills. And in all this, small mills depending on local customers might suffer—their business scooped away by larger mills offering freight equalization.

· Signs-The answer depends largely

on the thinking in Washington. Here, the steel industry sees both good and

bad signs.

Enough is known of the Administration's antitrust program, and the ideas of the men behind it, to indicate that the government's won't be officially too upset by freight equalization. FTC's new chairman, Edward F. Howrey, considers the idea a legitimate practice.

He has put FTC behind a bill introduced by Sen. Homer E. Capehart. This bill would make competition in "good faith" a complete defense in meeting charges of price discrimination. A steelmaker—or any other producer—need only prove that he has lowered his price in good faith, to meet a competitor's price, and he'd be in the clear.

Capchart's bill has not yet been reported from Senate subcommittee. Its chances are good of passing in the Senate, but it'll face a battle when it gets to the House. Some small business spokesmen there are unhappy about the "good faith" provision, feel the lan-

guage is too vague.

Sen. Estes Kefauver and Rep. Wright Patman have introduced their own versions of the Capehart bill—and the small business spokesmen like these versions better. Like Capehart's bill, Kefauver's would make good faith a defense but not a complete defense. Unlike Capehart, Kefauver would require the defendant to show his pricing actions haven't hurt competition.

• Workings—Actually, steelmen say, there's little likelihood that a competitor could be hurt by freight equalization alone. Where prices are equal—as they would be under such a system—a company stands or falls on the quality of its goods, its services; on the speed of its deliveries. What few companies are hurt by equalization, the steelmen add, will probably be marginal or high-cost producers.

# RFC's \$1.1-Billion Sale

Chronic shoppers can have a field day between now and June 30; the Reconstruction Finance Corp. last week opened the biggest "going out of business" sale in history.

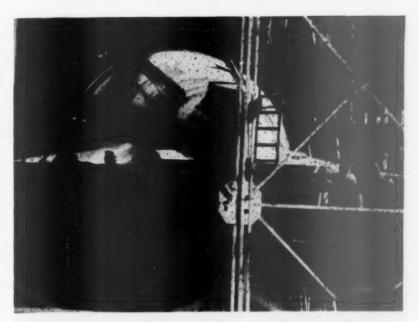
With its legislative lease on life gone, RFC has to clear its shelves. The goods include stock shares, bonds, notes, mortgages, factories, houses, and

assorted assets.

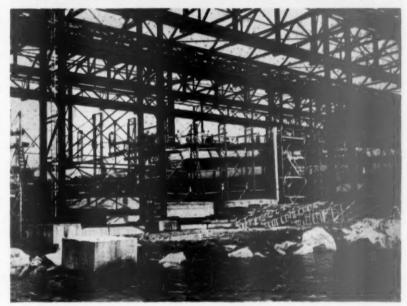
The first batch to go on the block were more than \$9-million in state and municipal bonds put up as security for public works loans.

Altogether the disposable items add up to about \$700-million in loans and securities, and \$461-million in other holdings

The scaled bids will be opened Nov 17, with RFC reserving the right to reject any it considers unsatisfactory.



# First Atomic Sub Gets Final Touches ...



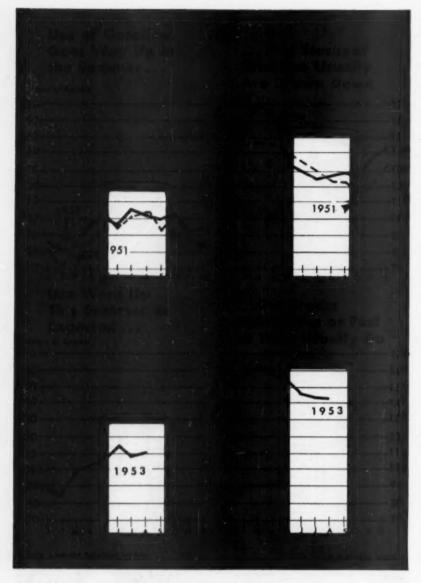
# ... As The Keel for a Second Is Laid

Atomic submarine production is picking up speed. This week, with the launching date of the world's first atomic-powered sub close at hand, the limelight switched to the keel-laying of a second sub. And the word was out that the Navy is already studying plans for a third.

Powered by atomic reactors supplying heat to their steam engines, the subs will be the swiftest underwater craft ever built, able to cruise at 25 knots submerged. They'll be capable of staying under the water indefinitely—can

circle the globe without refuelinglimited mostly by supplies and the endurance of crews. The subs are designed to dive a record depth of 100 tathoms.

Both the first sub, the Nautilus, and its successor, the Sea Wolf, now on the ways of General Dynamics Corp.'s Electric Boat Division at Groton, Conn., will cost from \$45-million to \$50-million. The third sub rumored in the planning stage reportedly will differ from these two, come equipped with an advanced nuclear power plant.



# Why Oil Is in Trouble

For years, overproduction has been one bugaboo that hasn't haunted the oil industry. Most of the time, the industry has been huffing and puffing in a just barely successful effort to keep supply up with demand.

Now production seems suddenly to have caught up. The industry finds itself staring with surprise and distaste at excessive stocks of crude oil, gasoline, and distillate (home heating oils). And prices, which finally got around to the industry's taste some months ago, are becoming shaky. Gasoline price wars are busting out all over.

• Too Much—Gasoline, the top-money product, tells the story best (charts, above). Two weeks ago there were 143-million bbl. of gasoline in hand; that's 26-million bbl. more than a year ago. Normally, vacation travel takes a 5-million-bbl. or more slash out of reserves in August alone. This year the August drop was 136,000 bbl. Likewise, stocks are normally low in September and October, then build up during the winter to prepare for summer consumption. Right now, though, stocks are higher than they were at last January's build-up point.

Crude stocks are also uncomfortably high. The 282-million-bbl. storage on Aug. 20 was 16-million bbl. more than the previous year. And more ominous, crude stocks showed no noticeable drop in the first two weeks of September despite a cut in Texas production. The distillate picture is much

the same, with Sept. 5 stocks at 120.9-million bbl., 14-million bbl. higher than a year ago.

• Controls-Reactions to this situation are appearing on various fronts.

State control bodies are taking steps to reduce production of crude. The Texas Railroad Commission, which cut the August allowable by over 700,000 bbl. a day, is meeting late this week to consider another cut. Gen. E. O. Thompson, its chairman, says crude in storage should stick around the 268-million bbl. level. In Oklahoma, the State Corporation Commission has ordered a 20% emergency cut in crude production. Kansas and one or two other states have also ordered cuts.

At the refinery level, reductions are likewise in order. Just a few samples: Sinclair Refining Co. is cutting its daily runs by 20,000 bbl. for September; Phillips Petroleum Co. has an 8,000-bbl.-a-day cut, Mid-Continent Petroleum Co. of Tulsa is reducing by 17%.

• Price Wars—Gasoline prices in many areas have been hit hard as wars break out. This week Standard Oil of Ohio cut prices 1½¢ a gal. in companyowned stations in the Akron area.

In the East, some local price wars are as much as two months old. In Syracuse, after seven weeks, some stations are selling 5¢ below normal. Other wars are reported in Providence, in Carteret and Perth Amboy, N. J., Wilkes-Barre, Altoona, and York, Pa., and Hartford, Conn.

Midwestern stations are giving "farmers' discounts," selling from 1¢ to 3¢ below posted prices. On the Pacific Coast, Los Angeles dealers sometimes give "under the canopy" discounts of 2¢ a gal. on well-known brands. More and more San Francisco stations offer 10% discounts, or a flat 3¢ off posted prices.

• Point of Peril—Gasoline is clearly the real danger point in the petroleum oversupply. Crude stocks can be brought back into line by reduced pumping. Distillate should work out all right, with the heating season just beginning—especially if there is a cold winter. But gasoline is overplentiful just as the time demand usually slows.

On top of that, gasoline production at the refineries cannot be chopped down to size. There is a certain flexibility of product in the run, but filling the winter's distillate needs means that a lot of gasoline will have to be produced at the same time. In any case, gasoline is the industry's money crop, the one where its margin of profit is greatest. So stocks just can't be cut really drastically during the winter.

All of which leaves the industry doing its best to ease off the oversupplies gradually while it gets ready to cope with its No. 1 worry: the return of Iranian oil to the market.

What's the Biggest Thirst.

You Can Imagine?

A dinosaur, perhaps? No, even the prehistoric demand of a 38-ton Brontosaurus was nothing compared to America's thirst for millions of gallons of oil today.

To help satisfy this insatiable thirst, Sinclair has developed the facilities to convert 400,000 barrels of crude oil into refined products each day. In terms of how you use it, how much oil is that?

Sinclair produces enough gasoline in one day alone to supply the average needs of 4,200,000 automobiles . . . enough househeating oil to heat over 720,000 homes . . . enough diesel oil to power a train like the "20th Century Limited" over 298,000 miles. In addition, Sinclair's daily output includes large quantities of heavy fuel oil, refinery fuel, lubricants, waxes and greases.

Behind this widely diversified refinery output is Sinclair's "Plan for Balanced Progress." Essential to this purposeful program are the properties, plants and modern equipment representing an investment of substantially more than a billion dollars . . . and a trained organization of over 23,000 people working to supply you with the tremendous volume of oil you want.

SINCLAIR
A Great Name in Oil



# Your profit

comes from risking

# working capital.

You protect both when your

# accounts receivable

are adequately covered by

# American Credit Insurance

... a credit tool—
never a substitute for
a credit department





American Credit Insurance contributes at least 12 major benefits to sound financial management and maximum sales efficiency. Find out how you can put them to work in your business. They are outlined in this informative book. We'd like to mail you a copy. Phone our office in your city or write American Credit Indemnity Company of New York, First National Bank Building, Baltimore 2, Md. Just say, "Mail me book offered in Business Week."

# **BUSINESS BRIEFS**

Plane stretchout added a notch when the Navy announced that 91 fewer F3H Demon fighters are to be delivered by McDonnell Aircraft Corp. in the fiscal year ending June 30. McDonnell is cutting its work force from 14,000 to 12,000 because of the changeover in production from Banshees to Demons.

General Motors is likely to be the sole producer of Army tanks by next spring, under Defense Secretary Wilson's "single, efficient producer" philosophy. GM virtually clinched the position by winning a \$200-million contract for M-48 medium tanks. The Army Dept. said GM's bid was roughly 12% lower than that submitted by the Chrysler Corp.

Mining companies often invade the oil industry, but the reverse is rarely true. However, Union Oil Co. of California has gone into the copper mining business in Arizona, via Pima Mining Co. Pima is owned by United Geophysical, Inc., a Union Oil subsidiary.

An air conditioner plant will be built at Staunton, Va., as part of Westinghouse Electric Corp.'s \$296-million expansion program. The multi-million dollar plant will employ about 500 workers, turning out packaged units.

New pipeline linking Chicago and Madison, Wis., will be started next spring by Badger Pipe Line Co. The \$15-million, 215-mi. line will be jointly owned by Cities Service, Sinclair Pipe Line, Pure Oil, and Texas Co.

\$125-million bond issue of the New York State Thruway was sold to a banking syndicate at a 2.6981% interest cost. The bidder-jointly managed by National City Bank of New York, Chase National, and Lehman Brosalso bought an earlier \$125-million Thruway issue, at a 2.63827% cost. The Thruway financing program has an authorized total of \$500-million.

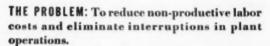
General excise tax, proposed by the National Assn. of Manufacturers, is bitterly opposed by the National Retail Dry Goods Assn. NRDGA calls the levy, which would be at the manufacturers' level, a "pyramiding and highly inflationary evil."

Small business has not fared as well as big business since the Korean outbreak, despite government help. That's the keynote of a stock-taking report issued by the now defunct Small Defense Plants Administration. SDPA says it provided more than \$723-million to help small business.

A Plant, too, is as old as its arteries . . .

R. FOR CUTTING COSTS:

# Scientific Materials Handling



THE METHOD: Scientific materials handlingthe regulated, organized flow of materials and parts. Materials handling often accounts for 30% or more of the total cost of manufacture. No other branch of production offers so rich an opportunity for savings.

RESULTS: The two case histories outlined below indicate typical reductions that are being made in operating costs, work stoppages and waste of labor, through scientific materials handling.

#### **Automobile Radiators**

A major radiator manufacturer faced the problem of locating a new plant in a Midwest area where skilled labor was unavailable. Conventional methods of manufacturing automobile radiators depend upon highly skilled labor. Accelerating production is difficult because of the extensive training new employees must receive before they can develop the speeds essential to profitable production.

The manufacturer turned over the entire problem of plant design, manufacturing methods and processing equipment to materials handling engineers on the premise that only unskilled labor would be available ... and that capacity production must be realized soon after the plant's completion.

The engineers studied every operation in the manufacture and assembly of a radiator. Each phase was broken down into its simplest elements. Whenever practicable, mechanical devices were designed to

replace hand operation. The results were so effective that the remaining manual operations could be performed by a man or woman with little or no previous training.

All operations were then integrated with a handling system that assured the arrival of materials and parts at the right station at the right time - in the proper condition - and in the best position. Then the plant's structure was designed around the processing equipment for maximum efficiency in routing materials from the first operations to final assembly.

This plant met all the manufacturer's specifications. The labor problem was greatly simplified. Production volume was realized from the start. And the quality of the product was materially improved.

#### Water Heaters

A high-volume manufacturer, producing 27,000 units per month, effectively utilized mechanical handling systems in fabrication and assembly. However, where assembly lines merged to move crated heaters to storage or shipping, 8 trucks and 23 men were required to palletize, load and move the finished heaters - a total of 4,600 man-hours per month.

This problem was ingeniously solved by designing a new device, to be used with standard equipment: a mechanical crate handler with side-shifting controls, permitting fast pickup and accurate positioning of crates without extra maneuvering. Palletizing was eliminated.

Results: A total of 40,000 man-hours and \$73,000 per year saved on direct labor costs, with an additional \$30,000 saved on indirect labor costs due to breakage.



Jones & Lamson engineers are regularly working with experts and specialists in nearly every field of production. Their extensive experience in cost-cutting methods and new technologies is at your service.

SOURCES: Mechanical Handling Systems, Inc., Detroit; Clark Equipment Company, Buttle Creek, Michigan.

BIBLIOGRAPHY: "The How Book of Cost-Cutting Materials Handling"; cupies available from Dept. A, The Yale & Towne Manufacturing Company,

JONES & LAMSON MACHINE COMPANY
Dept. 710, 503 Clinton Street

Springfield, Vermont, U.S.A.

Turret Lathes - Fay Automatic Lathes - Thread Grinders - Optical Comparators - Threading Dies & Chasers



Flashbulb Fred the photo fiend came in the Statler lobby. He told the room clerk, "Hold it, Son—photography's my hobby. I'd like to take your picture; would you pose a moment, please? Your smile will come across on film if you'll just murmur, 'Cheese.'"



When Fred was shown his Statler room he said, "Why, this is swell! It's cheerful and it's spotless clean—it really rings the bell! That Statler bed is super-soft—I'm sure I'm going to love it. If you boys just stand over there, I'll get a picture of it."



3 "Hooray!" cried Fred while in his tub. "This water's good and hot! There's lots of soap and towels, and a good bath hits the spot. I love my photo darkroom, but this bright room's even neater. It's so darn clean, reflected light is knocking out my meter!"



The meal he had that evening was sublime in every way. Said Fred, "I've never had such food! That steak was triple-A! From mushroom soup to apple pie, that dinner suited me! Hold still while I record this scene for all posterity."



Next morning Fred was on his way. He paused outside the door with tripods, lenses, lights and films, and cameras galore. Said he, "I've got some dandy shots and had a perfect rest! No wonder folks say Statler's where you really are a guest!"



STATLER HOTELS: NEW YORK . BOSTON . BUFFALO . DETROIT

CLEVELAND . ST. LOUIS . WASHINGTON . LOS ANGELES

ANOTHER GREAT NEW STATLER - HARTFORD

Do you owe yourself a treat? Make it a weekend at the Statler!

### WASHINGTON OUTLOOK

WASHINGTON BUREAU SEPT, 19, 1953



The conservative bloc in congress is beginning to stiffen. The midwest phalanx of Republicans is working hard to gain strength: It wants to offset any inclination by Eisenhower to "turn to the left" as the 1954 election approaches. The plan of Senate committee chairmen to get on the Republican Policy Committee next session is the most dramatic move yet. They want to be sure that the "Dewey wing" does not fill the vacuum left by Taft's death.

Ten of the Senate chairmen are pretty much "old guard." Only five are loosely labeled liberals or outright independents (such as Aiken of Vermont). So Sen. Capehart's move to get all 15 chairmen on the policy committee would strengthen the conservative position.

Revision of Taft-Hartley is the big issue at stake, though foreign trade, tax reduction, and social security extension also have played a part in prompting the Capehart maneuver. The conservatives fear that though Eisenhower accepted Secretary Durkin's resignation over how liberal Taft-Hartley amendments should be, the battle is still going to be fought. The conservatives feel that even a watered-down version of what Durkin wanted would be too pro-labor.

Putting all chairmen on the policy committee would weaken Sen. Knowland. The successor to Taft would become the agent of the Senate Republicans at the White House—not the Eisenhower leader of the Senate. Knowland would also have less freedom to deal with Democratic Leader Lyndon Johnson, a power that Taft had uncontested.

Home Republicans are worried about next year's election already. Campaign chairman Richard Simpson is swinging through the Northwest getting party people to work in their districts right now. He's concentrating on those districts where the election was won by only 5% or less in 1952. He figures there are too many such areas for comfort, what with the GOP's slim majority in the House.

All told, there are around 75 of these marginal districts. Not only Simpson's House Campaign committee, but the Republican National Committee, headed by ex-Rep. Leonard Hall, will spend most of its time—and money—in the close districts next year. The Citizens for Eisenhower group is being revived to give aid, too.

A tax on bread and other bakery goods is being talked up as a way to pay for a two-price farm support program gaining strength in Washington. The farmer would get a government check to make up for the difference between the free market price for his domestically consumed wheat and 100% of parity. It's not a warmed-over Brannan Plan, but rather a revival of the old McNary-Haugen idea, proposed in the 1920s.

Benson's wheat advisory committee recommends the program. So does House agriculture chairman Clifford Hope. Government spokesmen are trying out the plan on farmers in the wheat area. It's got political dynamite in it: Farmers usually complain about "government checks;" and some urban groups are bound to protest such subsidizing of the farmer. But the plan would remove the necessity of rigid controls over production—which farmers don't like either.

#### WASHINGTON OUTLOOK (Continued)

WASHINGTON BUREAU SEPT. 19, 1953

farmer would sell his entire wheat output on the open market, but would be given "certificates" guaranteeing him 100% of parity price on his share of the domestic consumption. Processors eventually would have to pass their tax on to consumers.

Congress will get a crack at the plan next year. You can expect the members to line up on sharp city vs. farm lines.

Sen. Capehart's investigation of the Export-Import bank is taking shape, and a lot of businessmen will be asked to help out. Questionnaires are going out to commercial banks and groups active in overseas investment. Capehart wants to know: How banks and businessmen get along with the Ex-Im; whether Ex-Im takes away business from private bankers; whether Ex-Im pays sufficient fees to local banks for handling some of its business.

Tighter lending policies will probably develop from the probe. Already Sec. Humphrey warns that the time is near when the stream of U.S. tax dollars for financing competitive business abroad must be stopped. And Sec. Weeks, more expressively, says we "must take away the crutches from nations abroad and sell them a cane."

The budget bureau is putting the squeeze on foreign aid, too. Budget makers in the Foreign Operations Administration—formerly Mutual Security Agency—have been instructed to hold down requests at least to this year's \$4.5-billion level. One report is that FOA is to get a ceiling under \$2-billion, but that probably is more drastic than even Sec. Weeks would want. FOA Administrator Stassen is counting on support from Clarence Randall's Foreign Trade Policy Commission to help defeat efforts to cut his agency too much.

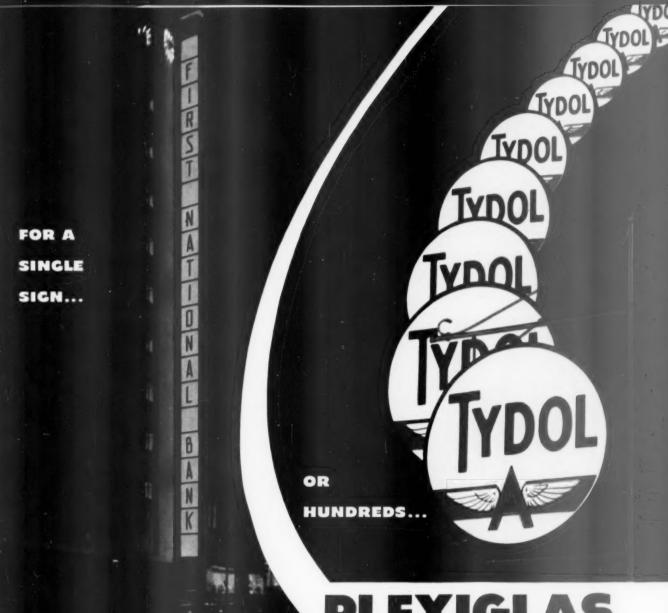
Appointment of a new Supreme Court justice can't change the complexion of the court very much or very quickly—especially since only "middle-of-the-roaders" have a chance. The only really big issue coming up for sure is segregation: Are "separate, but equal" schools still constitutional?

A sizable batch of cases important to many businesses has been obscured by the public interest in segregation. Here are some that either are on the docket or headed for it:

- Baseball: Three cases deal with whether baseball, as presently organized, violates the antitrust laws. Treble damages are involved.
- Retail price maintenance: Two cases challenge laws validating retail prices set by brand manufacturers.
- Book-of-the-Month club. It's appealing a ban on use of word "free" in advertisements.
- Radio and TV give-away programs: Federal Communications Commission is appealing a lower court's decision that such shows are not lotteries.
- Labor: Two cases involve a state court's injunction against picketing banned by Taft-Hartley. Another case tests whether Taft-Hartley's unfair practice provisions can be applied to the construction industry.

Other cases include constitutionality of state ownership of tidelands oil; regulation of the pricing of natural gas; state censorship of motion pictures; constitutionality of the federal lobbying act; and whether the Korean war is a "war" in the meaning of insurance policy war clauses.

Contants convergated under the general copyright on the Sopt. 19, 1953, Issue-Business Week, 330 W. 42nd St., New York, N. Y.



PEEXIGIAS is used for the letters and background panels of this 12-story-high sign identifying the first National Bank of Temple, Texas... and for the faces, letters, and trademarks of 6 foot-diameter signs that mark the locations of hundreds of Tidewater Associated Oil Company service stations in the East.





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Air does the job today. Many minesweepers are being built with Westinghouse Pneumatic Control Systems to control the engines from the wheelhouse. Westinghouse Controlair® valves and actuators position the engine throttles with hair-splitting accuracy. Maneuverability is excellent.

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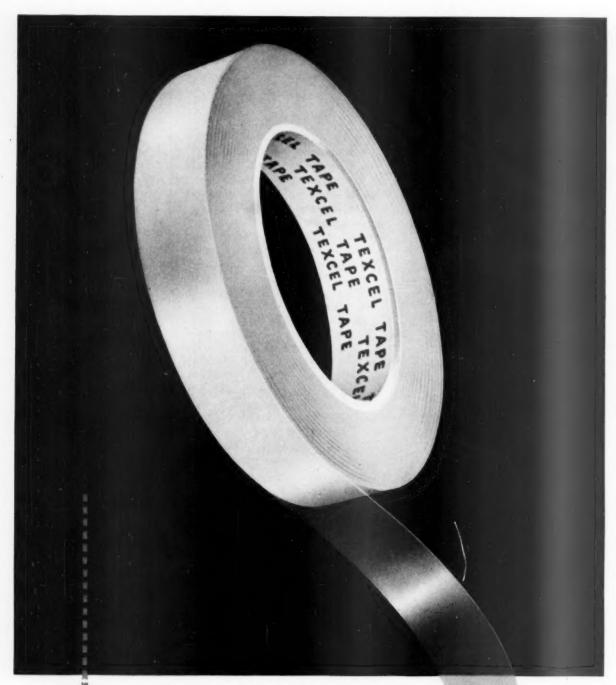
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#### MANAGEMENT



SMALL BUSINESSMEN no longer: Chester Hardt, Jack Bitzer, and Gerard Murray of O-Cel-O have found what happens . . .

# When a Small Company Joins a Giant

When (1) a capital-loaded big company on the lookout for products to diversify its line, and (2) a small firm with good management but an unfavorable financial and tax position bump into each other, one thing is almost sure to happen these days: merger.

That's the case with General Mills, Inc., a corporation selling \$480-million a year, and O-Cel-O, Inc., with sales in 1952 of about \$3.5-million. General Mills bought O-Cel-O in exchange for shares of stock worth \$3.4-million.

Next month, as a result of the purchase by General Mills, O-Cel-O will be ready to introduce and market a new surgical sponge. The announcement is scheduled to be made at the American Medical Assn. convention in Chicago. The sponge—of manufactured cellulose—has been designed and tested to replace the cotton gauze sponges and packs that have been ordinarily used in surgery.

It's just one of the new products that will be coming off O-Cel-O's Buffalo (N. Y.) production line now that the company has teamed up with General Mills. The big product,

though, remains the cellophanewrapped household sponge.

• Impact—The merger took place in the fall of 1952. At the outset, the impact on General Mills was negligible less than 1% of General's annual sales represented by O-Cel-O. In the long run, though, General's top management looks for O-Cel-O to play a more important part.

But the merger had an almost immediate effect on the operation of O-Cel-O as a going business concern and on the trio of young men, all around 35 (picture), who nurtured the firm from nothing to a leading position.

• All to the Good—Just what does happen to a small business and its management when a big corporation takes over?

So far it has been practically all to the good for O-Cel-O-from the viewpoint of both the business itself and the men who ran it.

O-Cel-O right now is in the middle of a \$5-million expansion program laid out for the next five years. It has already spent three-fourths of a \$4-million appropriation from General Mills' finance committee. A 25,000-sq.-ft.

addition to O-Cel-O's Buffalo plant (the second plant the company has occupied) is under construction, and new machinery is being purchased. That's only a beginning.

For J. A. (Jack) Bitzer, Chester R. Hardt, and Gerard E. Murray—the trio that founded O-Cel-O-the merger meant just this:

• Overnight the trio became one of the largest stockholding groups in a half-billion-dollar enterprise. Together, the three men own about 30,000 shares of General Mills common—or about 1.4% of the total outstanding. The largest single holding of General Mills stock is about 4%.

• Each of the three got a block of stock worth something over \$500,000 at market. On this exchange of stock there was no income tax. The trio realized, in readily marketable securities, \$1,700 for every \$100 originally invested.

 As managers, they retain their operating positions in O-Cel-O as a semi-autonomous division of General Mills. Their earnings and income before the merger were comparable to

# THE BALANCE

# POWER

on its own feet, if evaluated fairly. The scales are always in its favor when discerning buyers for industrial organizations, public utilities and cooperative power plants consider all the facts:

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General Voltage

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Stop Motors

BROWN BOVERI CORPORATION



19 Rector St., New York 6, N.Y.

"... he and his partners couldn't afford ideas anywhere near that big ..."

O-CEL-O starts on p. 43

those of other division managers of General Mills, so they've lost nothing as salaried management men. In addition they each pick up a tidy sum of more than \$20,000 a year in dividends from their General Mills stock.

As business managers, Bitzer and his two partners are content with the management arrangements. O-Cel-O still operates with pretty much of a free hand. Bitzer points out: "We are the only division of General Mills operating our own research laboratory."

• Few Changes—About the only noticeable changes have been the shifting of titles and accounting practices. Bitzer recently took the title of general manager, instead of division president. Hardt and Murray, formerly vice-presidents, are now assistant general managers of sales and production.

How does it feel to be part of a big corporation once you've tasted success in managing your own enterprise?

Bitzer's chief comment: "Well, there is a certain assurance in having the might of General Mills behind us."

What he means is that the working capital for an expansion program, full promotion of O-Cel-O's products, and the money for research and development of new products more than offset any slowdown in decision-making machinery.

It's pretty obvious that now, as part of a big company, Bitzer and his partners can't call a meeting on a major policy decision and come up with an answer in 15 minutes. There has to be liaison between O-Cel-O and the big company—and that can take time. Besides, when General Mills hands out millions of dollars for its new venture, it naturally wants to know where the money is going.

• Bigger Hopes—But backed by those millions of dollars, the trio can run O-Cel-O with big ideas for expansion. Bitzer already thinks in terms far in excess of a \$5-million expansion.

A year ago, he and his partners couldn't afford ideas anywhere near that his

• The Way Up—The story of their company is much the same as that of many another small business that got started by latching onto a red-hot idea.

In the mid-1940s, Bitzer, Hardt, and Murray—all with scientific educations—were working for E. I. du Pont de Nemours & Co. in Buffalo. Du Pont, they figured, wasn't pushing production of cellulose sponges as hard as it should.

"They were free," says Bitzer, "and

du Pont was the only one making them. We couldn't see why sponge production was taking a back scat."

So the three, aiming at a capital of \$60,000 to start, kicked in \$2,500 apiece, contacted friends and relatives in their home towns to raise another \$20,000, and then gathered in \$30,000 from Buffalonians.

• Big Success—The first sponges were turned out in a makest itt factory early in 1947. Since then the business has been a big success saleswise. Except for the first year, when the sponsors dropped \$5,000 on sales of \$121,000, the company has made money. By 1951, sales were \$2-million. In 1952 they were \$3.5-million.

Then, last year, Bitzer told stock-holders in his sixth annual report why selling to General Mills was a good idea: O-Cel-O was building up its research, engineering, personnel, and quality control departments. Freight lates, wages and advertising costs were going up. All this was cutting deeply into profits.

• Taxes Hurt—To top it all off there were taxes. Because of the excess-profits tax, the company was turning over about 70¢ out of every dollar of earnings, leaving little to plow back into the business or for working capital.

The net result was a 20% drop in profits during 1952, despite a big sales boost. Profits fell from \$236,438 in 1951 to \$187,562 in 1952.

Bitzer says the company could have issued more stock, but doubts that it could have raised enough money that way to expand and to take advantage of its sales potential.

The stockholders who originally backed O-Cel-O weren't in a position financially to invest much more—at least not enough to maintain their relative equity in any major financing deal (common stock dividends had never been declared). Bitzer, Hardt, and Murray would also have had to reduce their ownership.

 Merger a Natural—The General Mills arrangement seemed a natural. It gave the three men their capital requirements, a big hunk of General Mills common with whatever influence they could wield as a voting bloc in stockholder meetings, and the right to continue their operation much as they had in the past.

Besides that, their future as management men in the big company is fairly well mapped out. The big flour milling concern has been diversifying its line ever since top management realized the long-term trend in the flour business is downward. In this year's annual report Harry A. Bullis, board chairman, cited figures to show that the company's flour business since 1938 has dropped from 74% of total income to 52% in 1952.



#### Button, button, who's got the button?



Give up? It's SPS, of course. That is, if you want a streamlined button head screw which will not only enhance the appearance of your product but which can be used over and over again.

The hex socket on the Unbrako Button Head serves two important purposes. First, it makes the screw easy to drive or remove. Second, it prevents marring or mutilating the head or the work. That's why

you'll find Unbrakos used wherever things must be taken apart and put together again or where countersinking is not practical—appliances, coolers, gasoline pumps, inspection plates and panels, for instance.

Unbrakos are also a great deal stronger than other screws which superficially resemble them. They're made of heat-treated alloy steel and threaded to the head so that they seat flush; and they will stand extreme torquing without the head shearing.

Because Unbrakos are streamlined, there are no sharp edges to catch on loose clothing or give nasty cuts. Reason enough why they're used on doors, paneling, windows and seats of transportation equipment.

As we said before, UNBRAKO Button Head Socket Screws are made only by SPS of Jenkintown, the world's largest producer of socket screws. However, they are available from industrial distributors everywhere. Or write STANDARD PRESSED STEEL Co., Jenkintown 57, Pa.

Our Tifteth Year : A START FOR THE FUTURE



# When you think of money at work



Consumer financing has helped the home clothes dryer business—an appliance newcomer—register a ten-fold gain in six years. Today, from 65% to 70% of all domestic dryers are financed. Here is another new way money at work can lift drudgery out of the home, and raise our economy to a higher level.

In the Pittsburgh market, Peoples First National has played an important part in consumer credit. Last year, 56,465 people applied for Peoples Time Plans to buy clothes dryers and to make other consumer purchases.

This rapid growth of the clothes dryer business is an example of the many industries that prosper through consumer credit. For 90 years, Peoples First has extended financial assistance to individuals and companies in varied fields—throughout the nation. We invite you, too, to take advantage of our complete banking facilities.

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### **Product Partnerships**

Twice-a-month hookup of sales and production supervisors for each product is a new U.S. Rubber program. It is one way of insuring that nothing is overlooked.

Big companies are by nature diversified, their shots are often scattered over many projects.

From that springs a problem of assuring that each product gets the attention it needs. There's always a danger that a product will be unintentionally neglected by the first-line supervisors in sales and manufacturing, who can make or break the product.

Such neglect would be natural. The product superintendent in a plant, responsible for turning out, say, three products, might be hopelessly wrapped up in details of labor, raw materials, schedules. He'd have no time to sit back and take a broad view of any given product, in the way that top management scans the progress of the company as a whole.

• Every Two Months—U.S. Rubber, a very diversified company, has come up with what it thinks is the answer: a system called product partnership. For a given product, the production superintendent and the sales manager—the operating partners—must get together every two months. Above them, in an advisory capacity, is another pair of partners—the plant manager and the group sales manager.

The system was started two years ago at the company's Footwear and General Products Division. Footwear has eight plants, turns out 18 products ranging from shoes to sponges. U. S. Rubber is so pleased with the way product partnership has worked in Footwear that it is now extending the method to its four other divisions.

In Footwear, the company setup is that each product has a sales manager and a production superintendent. Frequently, the same man handles more than one product. But for purposes of product partnership, each product is dealt with separately.

• How It Works—Take the case of the Mishawaka (Ind.) plant. Under the plant manager are three product superintendents who directly oversee production of the plant's seven products. On the sales side there are six managers, only one of whom handles two products.

Once every two months each product has its own partnership conference. Superintendent and sales manager drop other chores for the time, settle down to a searching study of every detail—finance, quality, customer relations, research and development. They call on the staff departments to fill in any

gaps in their information till they get the broad picture of the one product as a separate business venture.

In addition to studying their product's performance at the time of their meeting, the operating partners also do some peering ahead. They must come up with ideas on how the product will stack up in the future and ways of hitting future targets.

The partnership goes a long way to instill personal interest in the product, to cure superintendents of the feeling that they are just a cog helping turn out something because the big boss wants

• Decisions—Within a framework established from on high, the partners make their own decisions on such things as personnel, research, costs, advertising. With the authority comes responsibility; the partners must show results, or tell the reason why.

U.S. Rubber decided on the twomonth interval as being just about right
to let the partners take stock. Their
meetings, of course, do not replace the
informal get-togethers that go on in any
plant to deal with specific problems.
But at the partnership meetings the
agenda is general. What's more, they
are policed by the executive assistant to
Footwear's general manager, who sees
to it that the game is played according
to the rules with adequate use of staff
sources of information. He also makes
sure that any disagreements on policy,
or suggestions, are brought to the attention of top management.

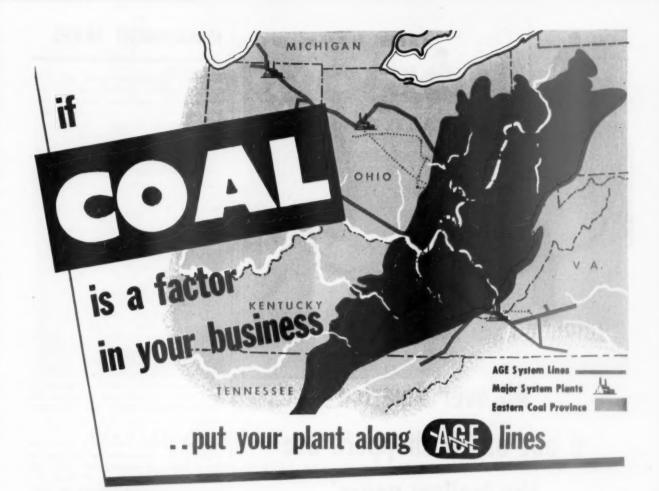
The executive assistant either sits in on the meetings, or studies the minutes that the partners are required to keep. Last week, for example, he attended four meetings at the Providence (R. I.) plant.

• The Gains—Top management of U. S. Rubber notes major advantages in the partnership setup:

• It has paid off in dollars. Some of the Footwear products have gone up 25% in earnings and sales in the two years.

 The company will be able to diversify still further, without any loss of efficiency or of individual attention to each product.

 The system provides an unbeatable training and proving ground for the company's management development program. Junior executives get broader experience, learning the functions of other branches, and getting the habit of taking a broad view.





OTHER

Major natural resources of the area are indicated in color on this large map: coal, clay, sands, limestones, oil, gas, salt, iron, many others. Also shown are power lines, waterways, railroads. It's detailed, helpful, free for the asking. Write for your copy today.

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#### ASS American Gas and Electric Company

Manager: Area Development Division, 30 Church Street, New York 8
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#### MANAGEMENT BRIEFS

American management spent over \$80-million last year in Christmas gifts for its customers, employees, and trade outlets, according to a nationwide survey made recently by Sales Management magazine. The average outlay per company was \$3,528.

A four-year course, designed to turn out purchasing executives, is being offered for the first time this fall by the Illinois Institute of Technology. The program was set up with the aid of the Chicago Purchasing Agents Assn., which is providing two full-tuition scholarships in the program.

Total disability claims provided for in employee pension agreements are running ahead of expectations, according to Life Examiners Institute surveys. The institute checked applications submitted to it for review from several large companies for 1952, found 22% of the claims rejected with only six appeals. That suggests, says LEI, (1) overly generous pension committees who bend over backwards to be fair and (2) misinformed, rather than dishonest, employees.

Lifetime Living, a magazine aimed at persons who have retired or are close to it, is being distributed by about 40 large companies as part of their preretirement planning programs for older workers. The magazine, which began publication last year, is geared to the trend by companies to set up such programs (BW-Apr.25'53,p66).

Showman George Jessel has made a deal with the B. B. Pen Co. to become its vice-president in charge of product promotion. Under his contract, Jessel gets an unlimited expense account and an option to buy shares of the company's stock.

Closed-circuit TV (BW-Jun.13'53, p48) got a tryout last week by Atlantic Refining Co. It put on a 50-minute program to inform 800 of its sales people in seven East Coast cities of a new motor oil Atlantic is bringing out this fall.

Management Development Foundation, nonprofit organization recently set up in Wilton, Conn., to aid companies with their executive training (BW-Aug.8'53,p98), is holding the first of several executive skills conferences Nov. 2 at Skytop, Pa. The meeting will cover rapid reading, speech and human relations, executive appraisal and counseling.

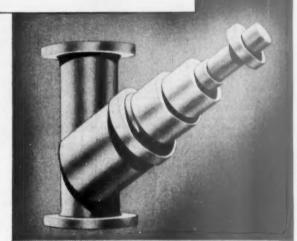
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SQYS: Henry Sternberg, V. P. and Sales Mgr. of the S. E. Hyman Company shown at right using slide-chart with Mr. White, Pres., White Auto Stores

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160 CENTRAL PARK SOUTH . NEW YORK Vincent J. Coyle, Vice-President & Managing Dir.

#### THE MANAGEMENT PATTERN

#### The Quest for Executive Theories

AMERICAN BUSINESSMEN for the past few years have done a surprising amount of soul-searching. The search has been for an answer to the question: Just what makes a good management man?

Oddly enough, the reason for this introspection can probably be laid to an era of practically un-broken prosperity. Success stories have become so common in American business that many a top administrator has come to wonder whether, if the economic chimate changes for the worse, he will have the ability to ride out the storm.

Hence, it isn't unusual to find companies calling on colleges, consultants, social researchers, or psychologists to analyze (1) their top management; (2) their crop of potential managers; and (3) their organization as a whole.

On net, all this is probably to the good. But with it comes a vast amount of hokum-patently designed to appease the management man or to cash in on his whims while profits are still fat.

This raises the question of what happens when (and if) the so often predicted recession occurs? One thing seems certain: Halfbaked theories about what makes a good management man, how to train younger men to become executives, and the characteristics of successful business administration are likely to be washed away along with the profits of a lot of corporations.

That, too, probably will be all to the good. Many people think that a lot of executives todayespecially younger ones-have, in a fruitless search for some vague concept of "the professional management man," lost sight of what actually makes a business tick.

AKE THE CASE of the Sunbeam Corp. When first-half earnings were compiled last month (BW-Aug.8'53,p60), it turned in a better-than-average financial result. Sales for the six-month period compared to the previous year climbed 30%, its net after taxes 92%.

BUSINESS WEEK asked B. A. Graham, the Sunbeam president, a simple question: Why?

The answer was revealing. It had little to do with techniques or general principles. Graham's reasons: (1) new products; (2) aggressive promotion of established products; (3) a plant expansion program now beginning to show up in the profit column.

Take the reasons in order. First, Sunbeam introduced two new products last year that proved very hot-the combination cooker and deep fat fryer, and the Junior Mixmaster. It wasn't until the first six months of 1953 that the full sales effects of those two prod-ucts were felt. They represented a "sizable proportion" of Sunbeam's

Second, the company this year is spending \$5-million in advertising. It has taken on two TV shows, its first venture in this field. The result, management expects, will produce sales in 1953 of \$75-million against \$66-million in 1952.

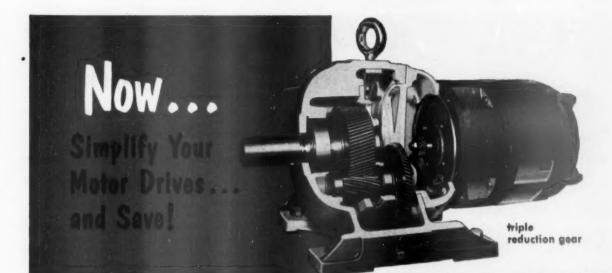
Third, since 1949 Sunbeam has added 792,450 sq. ft. of manufacturing space—the \$12.5-million cost of plant and equipment being paid out of earnings. Sunbeam is just beginning to feel the full benefits of this new plant and equipment. As Graham says: "In the traffic appliance business when you get volume you cut unit costs -and that's what's happened to

HAT ANALYSIS may seem overly simplified. Other facts certainly played a part-smart financing, dealer relationships, good labor relations. But it should be obvious that anything other than product, aggressive selling, and modern plant and equipment is secondary in the success of business.

That is a fact that perhaps has become buried, during this lush and comparatively easy business management period, by all sorts of theories that attempt to explain what makes a successful executive.

ATELY some higher management seems to be awakening to the need for more research to find a formula for educating younger men for future jobs.

The answer may be simpler than it would appear. You become a successful management man by learning your industry-whether it is appliances, coal, steel, oil, or autos. In other words, management in a vacuum doesn't exist.



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### PRODUCTION

# Psychologists at Work

 With increasing mechanization, worker attitudes are a key factor in raising productivity.

Hoping to keep workers and supervisors in the right frame of mind, American Cyanamid has launched a major psychological experiment.

One of the facts that's come to light as engineers have inched their way toward the automatic factory is that as equipment becomes more mechanized, the worker's attitude becomes a key factor in productivity. No matter how fancy the equipment, output takes a wallop unless a worker gets a kick out of his job.

To keep workers on their toes, industry has tried many approaches ranging from incentive plans to physical improvements such as improved lighting, noise control, and custom-tailored

• Psychological Slant—Now American Cyanamid Co. is taking a psychological tack aimed directly at changing the attitude of individuals. It will be about the most ambitious venture along these lines since the six-year study at the Hawthorne (Chicago) Works of Western Electric Co., Inc. a generation ago proved a close relationship between worker psychology and production.

Basically, the Cyanamid experiment is a program of group therapy. The idea is to get managers to sit down at a round table with their immediate subordinates to thrash out problems. The roundtable discussions follow a general pattern over a couple of months. At first, the members of the group chat about noncontroversial matters. Later they tackle plant problems, and grievances. As informality and mutual trust develop, they tend to develop common objectives.

• Plan Developed—The experiment started at Cyanamid's Calco Chemical Division in Bound Brook, N. J. in 1946. The company was interested in increasing production and lowering costs. Merrill E. Kilby, then a successful young department manager, was brought into Calco's front office as training director and given the assignment of working out a program of industrial relations for the whole plant that would get results.

It was a big order. Calco had grown rapidly and semewhat haphazardly during the war. Employment was running about 4,500 people in the main plant and about 1,500 more in sur-

rounding areas—more than double the prewar level. While the physical surroundings of workers had kept pace with changing times, the plant had grown too rapidly for people to get to know one another.

To help find a solution, Dr. F. F. Bradshaw of the consulting firm of Richardson, Bellows, & Henry was called in. In the discussions that followed, chemist Kilby and psychologist Bradshaw decided that attitudes were the key to the problem. The reasoning: though you may satisfy a man's material needs and pay him well, he still has emotional senses, a basic need for recognition and security that must be looked after.

To succeed they realized that they had to find a method for transforming the way all these individuals thought and acted with relation to themselves and the others. But before you can teach adults, you have to instill a desire to learn. They have to want to participate

• Focal Point—Key to the Calco plan is the "vertical roundtable." It was evolved over a period of a year—mostly under cover. The plan was to bring together the various echelons of management on an informal, relaxed basis. That way, they hoped that the individuals would get to like one another, get to understand one another, and eventually develop common objectives.

The first guinea pigs were selected with care to give the program every possible chance of succeeding. Men were picked who seemed likely to be susceptible to the idea and who were leaders in their own groups. If the idea worked, Calco hoped it would set off a chain reaction, with the original participants spreading the program in their own bailiwicks.

• Trial Run—The original members of the group spanned management from Calco's manager of manufacturing to a shift foreman who had recently been promoted from shop steward. Seven echelons were represented along with Kilby and Bradshaw.

The group met for lunch once a

week at a small, quiet inn about three miles from the plant. Afterward they talked. Once a week was considered often enough to keep the shine from wearing off between times. To encourage everyone to feel free to participate in the discussions, a special 11-ft. roundtable was constructed.

No member was allowed to miss luncheon, arrive late, or be called away to the phone. The luncheons were held for 34 weeks—long enough to get under everyone's skin.

Bradshaw administered tests of attitude before and after. He feels that the attitudes definitely changed in his guinea pigs as they came to understand each other. The men, none of whom could be called a shrinking violet, aired their grievances with the company and with each other. The luncheon atmosphere became a lot more friendly.

• Spreading Out—By the 34th week the men were sufficiently agreed on basic objectives to develop a training program for subsequent vertical roundtables in the plant. This is roughly how it works:

A department manager calls regular meetings of his immediate subordinates. For the first eight or 10 weeks they talk about their own experiences and work their way through a variety of subjects including individual motivation, company objectives, aims of education, and human relations. In this period they come to think and work congenially.

Eventually, they work up to the main content of the course which includes some study of creative thinking, basic human needs, and work simplification. In the discussions, conference leaders use material from such books as William J. Reilly's The Twelve Rules for Straight Thinking, Alex Osborn's Your Creative Power, and Eliot D. Hutchinson's How to Think Creatively.

• Appraisal—Some 73 groups have met in American Cyanamid since the first vertical roundtable. Both Kilby, who is now Cyanamid's director of training, and the company shy away for any claims for the program. In a very general way, Kilby has been quoted as saying that it takes about six months for the effects of the conferences to sink in, and that he feels the conferences enable most of the men to discuss problems openly and more objectively.

Dr. Bradshaw also hesitates to make claims. He feels that there are so many variables and many long-range implications to be considered that only a comprehensive study by an outside agency could pinpoint the accomplishments. But even this, he feels, would be open to question because no com-



Above is pictured the easy narrow space operation of a Revolvator Go-Getter Hi-Straddie Lift with fingertip central-fully extensive-200° turning arc-no operator training required.



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FINGERTIP CONTROL. All Revolvator lift trucks are controlled by simple switches placed on the operator control bar. On the powered models one switch serves for forward or reverse movement of truck and load. The second switch serves for the raising or lowering of loads. Operators of this equipment, therefore, can initiate work savings from the moment of delivery of any piece of Revolvator Company equipment at their plants.

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prehensive survey was made before the program went into operation.

He feels that success is due in such large measure to Kilby's own drive and personality that it loses much in translation. Kilby, in turn, gives all the credit to Bradshaw. That means, obviously, that you have to have enthusiastic and well qualified people running the show, or it may blow up in your face.

In discussing the possible transfer of a group therapy program of this type to other companies, Bradshaw is very cautious. Results would be most likely to show up clearly in cases of unstandardized work where each day's job is a little different and the man doing it has to think about alternative methods. For example, if he knows that repair job will be appreciated in a hurry, he may be able to take some short cuts he wouldn't use on a job he felt the company didn't care about.

Kilby sums up the program this way: "If a man goes through our conferences thoughtfully, he comes out a better team man. We expect no miracles; but when the roundtable sessions are over, our men at least have a third-party reference for sounding out the other person's thinking. That makes for understanding, gets everyone pulling in one direction."

# Putting Micro-organisms To Work on Waste

Using micro-organisms to gobble up industrial waste is an idea that appeals to a lot of paper mills, textile mills, food processors, and others who have to cope with stream pollution. In some cases, microbes are the only things that can do the job. More often it's just that biological methods leave no voluminous sludge and produce fewer undesirable byproducts than comparable chemical techniques.

But so far micro-organic methods have been just an idea for most companies. For several years, a number of outfits—notably Dow Chemical Co.—have been using biological treatment of plant waste, but these companies have produced the microbes only for their own experimental use.

Now Reliance Chemicals Corp. of Houston, Tex., is out to make the antipollution microbes available to all industrial comers. Reliance, which in the past year has built a thriving business around the manufacture of microorganic cultures for use in municipal sewerage units, is aiming at the industrial field with a new series of specially bred cultures.

• Process—Since Reliance has had considerable success with sewage treatment, industrial waste treatment probably

won't provide any drastic new problems. It all boils down to finding the right micro-organism for the particular waste-treating problem.

• Prospects—Here are some of the in-

dustrial jobs the company has in mind

for its special cultures:

• Decomposing oil in refinery wastes.

· Speeding up the oxidation of paper-mill and dairy wastes.

· Treating cannery, textile-mill, and citrus processing wastes in lagoons.

· Treating sugar-mill wastes. So far Reliance's specially bred cultures have not found their way into any plant-scale industrial waste-treating operations. But a number of companies and industrial groups are investigating them on a small scale. While these studies are incomplete, the company says they indicate that micro-organisms provide a low-capital approach to industrial waste problems. In addition, they can be used with existing facilities.

#### **Growing Pains Eased** For Plastic Panels

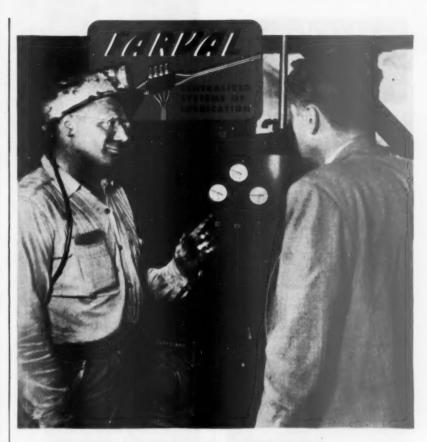
Translucent panels reinforced with fibrous glass are a segment of the plastics industry that has a tremendous potential. In the past few years, this sturdy, lightweight material has found a growing range of uses in the construction industry-among them permanent awnings, shower doors, lighted ceilings, and decorative partitions.

As 'in any infant industry, the manufacturers have needed time to develop factory know-how and experience. They have also had to raise considerable capital for research and mechanized pro-

This week an announcement from Libbey-Owens-Ford Glass Co. indicates that for at least one important member of the industry, development problems are ending. LOF, a producer of fibrous glass under a royalty arrangement with Owens-Corning Fiberglas Corp., acquired Corrulux Co. as a division about a year ago. The Houston (Tex.) company was already a major producer of translucent panels, but LOF backing has helped considerably.

Corrulux Division is now in the midst of an expansion that, when completed about Oct. 1, is expected to increase capacity 80%. New automatic equipment is being installed.

At the same time, Corrulux is bringing out a new type of panel that uses fibrous glass cloth as the reinforcing agent. The new product weighs about 1 lb. per sq. ft. It's said to be flexible enough to bend parallel to the corrugations but rigid enough to be used for ceiling light fixtures on a 4-ft. span.



PRESIDENT HEARS ABOUT A GRIT-PROOF LUBRICATION SYSTEM

#### "Farval cuts repairs 100%—saves 31,500 hours"

The Problem: "Expensive bearing failures were crippling our coal cleaning plant. Three men with grease guns couldn't keep coal dust from getting into and ruining bearings. Constant shutdowns to replace bearings seriously interfered with production.

The Solution: "We installed 2 Farval automatic systems of centralized lubrication. Farval immediately stopped shutdowns due to faulty lubrication. That was 1948. Not a bearing lost since!"

The Savings: "Looking after Farval takes only 3 hours a day, saving the equivalent of 2½ men's time. In five years, we're 31,500 man hours ahead. We've extended Farval lubrication to all our machines.'

This example indicates the tremendous savings possible with Farval-in repairs, production time, man hours, lubricant! Why not write for our Free Lubrication Survey to learn how Farval can help you?

#### WRITE for:

Free Lubrication Survey

Without obligation, we will send one of our lubrication engineers to inspect your plant equipment and present a written analysis of what Farval can do for you.

Illustrated 20-page book tells the full story of Parval, how it works and how it can save you money.

FARVAL is the Dualine system of centralized lubrication that hydraulically delivers oil or grease, exactly measured, to each individual bearing as often as desired. You'll recognize Farval by the familiar valve manifolds, dual lubricant lines and central pumping station.

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Motor with Internal fluid coupling. Provides smooth load acceleration. More compact than separate motor and coupling. Assures perfect alignment. Will start heavier loads than standard motors of same horsepower. Used on cranes, conveyors, mixers, etc.



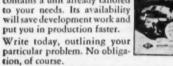
Consists of Reuland motor and worm gear reducer. Provides unlimited mounting versatility. Permits use of 1 high speed and 2 slow speed power-take-off shafts, if desired. Ideal for designing into cramped quarters. Also available with Fluid-Shaft drive motor.



"Doughnut" type design allows extension of shaft entirely through brake. Permits use of TWO output shafts per motor. Can be mounted on the input or output shafts for both) of Fluid-Shaft motors and motoreducers. Only 6 major parts . . . self adjusting . . . half usual length.

#### OVER 600 SPECIAL ELECTRIC MOTOR DESIGNS

There is a good chance the Reuland "library of specials" contains a unit already tailored to your needs. Its availability will save development work and put you in production faster.





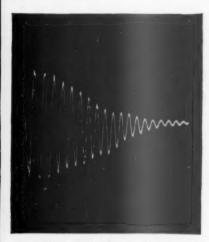
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OSCILLOGRAPH makes electrical impulses visible. Words look like this.



TESTING an auto starter relay, you see a pattern like this . . .



. . . pulling a cork from a bottle makes a sound that fades like this and . . .



. . . shooting simulated lightning from a transformer gives this pattern.



PLOTTING THE ANSWERS to engineer's question on the behavior of a vacuum tube is just one of the many uses behind the success of the oscillograph. Today it's a . . .

### Key to the Electronics Boom

One of the peculiarities of electrical work is that normally there's nothing to see. A wire looks the same whether it's carrying current or not—unless it's red hot from overheating.

But what the electrical engineer can't see with his naked eye can often be brought to light by the cathode-ray oscillograph—older cousin of TV and radar. The oscillograph translates electrical impulses into visible images like those in the pictures at left. Along with answering a lot of the engineer's questions about electrical behavior, the instruments do a big variety of jobs such as testing the force of an explosion, plotting the speed of projectiles, or checking the balance of rotating parts.

With these talents, it's no surprise that the oscillograph today is riding the crest of an electronic boom that has rocketed electronic production to a \$6-billion high-50% above the peak war-

time level. From a modest role as a laboratory device, it has become a vital fixture on production lines in dozens of industries—with unlimited vistas ahead.

• Workings—Basically, the secret of the versatility and accuracy of the oscillograph stems from two factors. One is the use of auxiliary units called transducers that are able to convert light, heat, sound, pressure, mechanical motion and other phenomena into the voltage impulses that set the cathoderay tube to plotting. The other is the fact the oscillegraph has no moving parts; the dynamic element is a beam of electronics.

Here's the way the setup works: The electrons travel in a pencil-like stream through a high-vacuum glass tube. When they strike a fluorescent screen on the face of the tube, they produce a spot of light.

On the trip from the anode or source





# How tiny magnets warn pilots of engine fires

A tiny Carboloy permanent magnet instantly turns in the fire alarm when aircraft engine temperatures begin to rise rapidly.

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Write us about any of your magnet design or application problems. Send for free design manual PM-101.

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Plants at Detroit and Edmore, Michigan

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for exceptional resistance to corrosion, along with erasion and abrasion.

CEMENTED TUNGSTEN CARBIDES

for phenomenal cutting, forming, wear resistance

HEVIMET

for maximum weight in minimum space, and for radioactive screening

"Carboloy" is the trademark for the products of the Carboloy Department of General Electric Company

of electrons to the screen, the beam passes through a magnetic or electrical field controlled by the transducers. Currents or voltages from the transducers cause variations in the field. This, in turn, causes the electrons to oscillate in direct proportion to the currents. For example, the higher the pressure that's being measured, the more signal a pressure transducer will put out and the more the beam will be deflected.

The movement of the spot of light on the screen may be so rapid that it appears to the eye as a solid line. But whether the activity takes place in hundreds of millionths of a second or over several hours, the electronic pencil draws an accurate graph telling the viewer just what happened, how it happened, and how long it took.

When the stream of electrons falls on a fluorescent screen where the tracing becomes visible, the instrument is often called an oscilloscope. The tracing, however, can also be made directly on a photographic plate or moving film strip for a permanent record.

strip for a permanent record.

• Rapid Rise—The first commercial cathode-ray oscillograph was put on the market in 1932 by Allen B. Du Mont Laboratories, Inc. It played a vital part in the development of television when that industry flowered briefly before World War II.

When television went to war so did the oscillograph. Like television, it helped in the development of other cathode-ray cousins: radar and Loran. It also got into the testing, developing, and maintaining of electronic devices for aircraft, tanks, guns, and ships.

By the end of the war it had spawned a whole new concept of equipment designed with electrical circuits layed out so as to facilitate oscillograph testing. The reason for the adoption of the new technique was simply that the advances in equipment had been so rapid that many conventional testing and quality control techniques were obsolete. Plotting a graph by hand based on point-bypoint experiments was too time-consuming, too complex for operators, or too costly because of the setups.

The big boom in mass-produced television after the war would have been impossible without the familiarity of war-trained electronics engineers with oscillograph testing. The majority of the men who made the electronics boom possible picked up experience in the services where the instrument was widely used. Many of the younger men knew no other way to test electric equipment and they had a lot to do with spreading the oscillograph throughout industry.

• Four Markets—Companies making oscillographs guard sales figures carefully, but it's certain that hundreds of thousands of them have been sold. Du Mont, which claims to be the



The clatter of heels



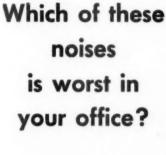
The screech of wheels



The drone of voices



The ring of phones





The buzz of buzzers



The rat-tat of machines

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Saves over 73% on maintainance! Statistics show that the average cost of maintaining hard-surface flooring is about 60¢ per square foot per year as against 16¢ per square foot per year for Cushionlok. Just figure the number of square feet in your office and see all you'll save with Bigelow Cushionlok.

Send for a sample. Write on your business stationery to Dept. A, 140 Madison Avenue, New York 16, N. Y.

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For Better Acoustics

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Minnie wants dividends. More of them. More often. Out of earnings, depreciation reserves, petty cash or whatever. She's strong for a stiff retrenchment policy, too.

Minnie's influence, real or imaginary, is wide. You see the results in the company with hoarded depreciation allowances—and obsolescent low-output machine tools. You see them in the company with a "strong cash position"—at the expense of impaired capital investment . . . in the company paying excess dollars in dividends—instead of investing them, even at the cost of tax penalties, in the physical assets required to maintain and expand markets through low-cost output.

It's machines, not dollars, that keep a company competitive and strengthen the stockholder's equity. Machines like our own Monarch lathes. Our files are filled with job reports showing how Monarch lathes have boosted output and lowered costs—how they have in some cases actually paid for themselves in less than one year of operation.

Can't even the Minnies be convinced of the worth of capital investments like that? It's one of management's biggest jobs. And it's our job to give you the facts to prove it to them. We can prove it to you—with brochures, job reports or movies. Just inquire . . . . . . The Monarch Machine Tool Company, Sidney, Ohio.



The Monarch Mona-Matic—high-speed production turning at its finest, Monarch has built fine lathes for production line and toolroom since 1909—has pioneered the use of tracer controls since 1930.



FOR A GOOD TURN FASTER . . . TURN TO MONARCH

biggest manufacturer, lists four major markets.

• Electronics, where the instrument has become almost as common as the pencil in work on communications, TV transmission, and power lines.

 Aeronautics, where the instrumentation to get planes on and off the ground is so complicated that often the oscillograph is the only practical method for making a measurement.

 Automobiles, where the flexibility of the instrument has been exploited in development of new engines, improved combustion, and elimination of vibration.

 Nuclear development, where atomic researchers need rapid measurements of physical and chemical processes that can only be accomplished with the oscillograph.

• Future Promise—The cathode-ray oscillograph has made huge strides in 20 years. The most modern types are smaller, more portable, and considerably improved. But electronics experts feel the oscillograph is still in diapers. The steady advance of electronics is bound to sweep it ahead.

The electronics industry is broadening and that means more applications for the oscillograph. Computers, controls for the automatic factory, instrumentation of all kinds, and atomic power are all areas with a tremendous growth potential. At the same time, the industry is getting more complicated. Increasingly stringent requirements for reliability and performance under adverse conditions, and the development of miniature electronic parts raise some crucial problems that may eventually find their solutions in patterns on the oscillograph.



#### Hurricane Bridge

Only diagonal wire ropes are used to support the concrete deck of this new San Marcos Bridge in El Salvador just completed by John A. Roebling's Sons Corp. The new design is said to be more resistant to earthquakes and hurricanes than conventional and bulkier suspension bridges.



THIS



GAR WOOD



EQUIPMENT



BUILDS



RETTER



ROADS

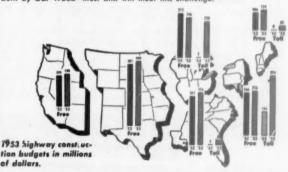
#### another big GAR WOOD market

Americans move 1,000,000 miles a minute over their highways. We have 60-million licensed drivers handling 55-million registered vehicles—more than was forecast for 1960. More than half our workers drive to their jobs . . . and their products go to market in 9-million trucks. A hundred thousand buses carry 6,000,000 children to school and home again while postmen travel 1½-million miles of rural routes to serve 60-million rural hames. Today, traffic volume moves 500,000,000,000—or half a trillion—vehicle miles annually—and that may well be doubled by 1970. Yet, of our 3,300,000 miles of public roadways, two-thirds is dangerous and unsafe.

86 per cent of all traffic moves over the 664,000 miles of our federalaid highway system. This highway network is America's main artery of commerce—any sickness in this system affects the very life-blood of American business. Yet 424,000 miles of this system needs major overhauling right this minute.

The inter-state system of 37,800 miles (shown in the map above) represents little more than one per cent of the nation's total but carries more than 100 billion vehicle miles of traffic. Yet, of its 31,831 rural miles only 1,900 are considered adequate. Of 5,969 urban miles only 398 are adequate. Of 10,000 bridges, 19 out of 20 are substandard. A cold, factual study of America's defense highway needs reveals damning shortcomings.

The Automobile Safety Foundation puts the cost of modernizing our highway system at a staggering \$85,500,000,000 . . . \$5,700,000,000 a year for 15 years. But the investment will be returned in business expansion and a stronger America for facts show that good roads make good business. Taday we're faced with the mightiest construction challenge in history. Men, money and machines—including road-building equipment built by Gar Wood—must and will meet this challenge.



GAR WOOD INDUSTRIES, INC





WAYNE DIVISION, Wayne, Michigan; ST. PAUL MYDRAULIC MOIST DIVISION, Minneapolis, Minn.; FINDLAY DIVISION, Findlay, Ohio; RICHMOND DIVISION, Richmond, California; NATIONAL LIFT CO., Ypsilanti, Michigan; UNITED STOVE CO., Ypsilanti, Michigan



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AUTHORIZED CLARK INDUSTRIAL TRUCK PARTS AND SERVICE STATIONS IN STRATECIS LISTST



#### PRODUCTION BRIEFS



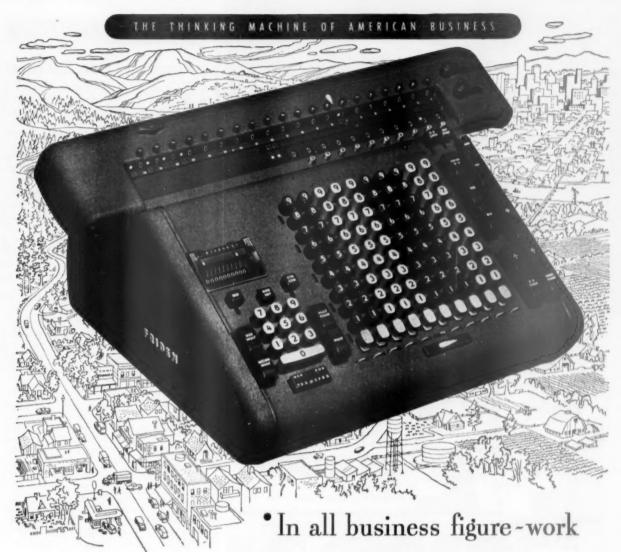
Easier, cheaper repair is one feature of Parker Pen Co.'s \$4.5-million plant at Janesville, Wis. Access areas 4-ft. high (see picture above) carry all of the plant's utility wiring and piping. They give repair crews room to fix or alter the lines that are fed to the production floor above.

Another electric furnace for making elemental phosphorus is planned by Mon-santo Chemical Co. The increased capacity will help meet the demand for phosphate products used in fertilizers, detergents, and insecticides. The furnace, to be installed at Monsanto, Idaho, will bring the firm's total to eight.

A mass spectrometer service has been set up by Consolidated Engineering Corp., Pasadena, Calif. Consolidated will handle your problems in chemical analysis, process monitoring, and isotope-ratio determination. The service is designed for petrochemical firms, universities, and hospitals whose needs don't justify the purchase of an expensive spectrometer.

A new ammonia producer: Columbia-Southern Chemical Corp., a subsidiary of Pittsburgh Plate Glass Co., will put up its first plant at Natrium, W. Va. Hydrogen, a byproduct of the company's present operations, will be used as a raw material. Production is slated for late 1954.

Louise is the name of Detroit Steel Corp.'s new blast furnace, lit last week at Portsmouth, Ohio. The \$12million stack will triple Detroit Steel's pig iron capacity to an annual rate of more than 750,000 tons.



# Extra savings

• Exclusive features enable the Friden fullyautomatic Calculator to perform more steps in figure-work without operator decisions than any other calculating machine ever developed. Watch Friden figure-thinking save for your business . . . save so much in human time that this Calculator's cost can be quickly written off! Friden sales, instruction and service available throughout the U.S. and the world. FRIDEN CALCULATING MACHINE co., INC., San Leandro, California.

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FRIDEN "DECISION-MAKING" FEATURES YOU SHOULD SEE!

Time-saving abilities of the Friden fully-automatic Calculator include (1) automatic accumulation of individual extensions and ... (2) automatic selective half-cent adjustment, Need for operator decisions is also eliminated on many other figure-work steps! **.....**  If... the average Lyon Steel Equipment
Dealer dressed to represent every kind of
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#### NEW PRODUCTS

#### Roaming Lawn Sprinkler

Latest thing in lawn sprinklers is an automatic job that propels itself around your garden, winds up the hose, and shuts itself off.

The sprinkler is mounted on a two-wheeled device much like an ordinary hose reel. Lay up to 125 ft. of hose around trees or corners in any pattern you like. Adjust the sprinkler, turn on the tap, and forget it. Water pressure (30 lb.) will wind the hose onto the reel, pulling the sprinkler in toward the tap, at the rate of about 17 ft. per hour. When the reel reaches a special valve, the sprinkler shuts itself off. At one setting it can water an area 30 ft. to 70 ft. wide and up to 125 ft. long.

The new sprinkler is manufactured by Reel Sprinkler Co. of Toledo. The device stands 22 in. high, 16½ in. wide; weighs about 22 lb. It's being promoted with emphasis on the importance of good sprinkling in the fall to establish a good lawn. But the big push will come next spring.

• Customers—While the automatic features make it sound good to the suburbanite who now goes out several times an evening to move the sprinkler, they will probably appeal even more to schools, churches, hospitals, industrial plants, hotels, and country clubs. In such places the gardener can set a hose pattern in the morning and again in the afternoon or evening. This leaves him free for most of the day to attend to other duties.

• Source: Reel Sprinkler Co., 1802 N. Westwood Ave., Toledo 7, Ohio.

• Price: \$45, plus \$5 for automatic shut-off valve.

#### Compass for the Arctic

Silicone rubber is being used in a small but highly reliable Army pocket compass which operates over a temperature range from 125F to minus 65 F. It can be stored from 160F to minus 80F. At these extremes the rubber keeps its flexibility to actuate a needle-locking device when the compass is closed.

First public announcement of the compass was made last week by General Electric Co., whose SE-450 silicone rubber was used. Successful use in this delicate instrument could foreshadow a wholesale invasion by the versatile silicones into all kinds of precision machinery for Arctic operations.

The new compass was designed and assembled by Marine Compass Co., Pembroke, Mass. The rubber was molded in the form of a shallow cup

by Acushnet Process Co., New Bedford, Mass. This cup is pressure-fitted inside an aluminum case to seal the intricate parts against moisture and protect them from physical shock. Because it neither hardens in the cold nor softens in the heat over the specified range, it preserves the mechanism from temperature damage under all conditions of use.

As an indication of the delicacy of the job, GE says that the compass needle is pivoted on a vertical bronze shank smaller than a phonograph needle. This part is held firm by a tiny molded ridge on the inside of a pinhole in the bottom of the cup.

• Source: General Electric Co., Silicone Products Dept., Waterford, N. Y.

#### **NEW PRODUCTS BRIEFS**

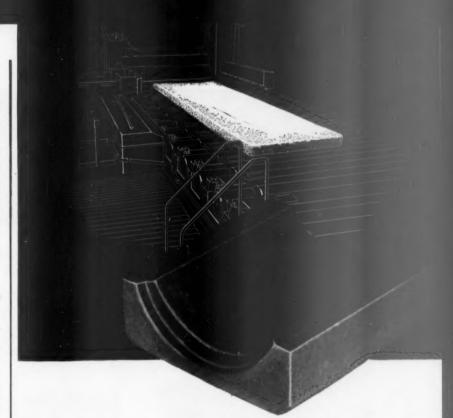
Absorbent paper wipers, for cleaning everything in a plant from heavy machines to precision parts, are being introduced by Scott Paper Co., Chester, Pa. Each wiper has two embossed sheets fastened together for durability and efficiency.

A slide rule has been developed for bridge players who can't figure out what to bid. It's based on the Goren point-count system and is in the form of a wheel with instruction on the back. Price is 50¢ postpaid from Bridge Masters, PO Box 6522, Atlanta, Ga.

The bambino is a typewriter-size Ozalid copying machine designed by Ozalid Division of General Aniline & Film Corp., 230 Park Ave., New York. The company says the machine will copy documents up to 9 in. wide and of any length, printed or drawn on translucent paper, at a cost of less than 114 each, including labor and material.

A hardboard panel, mirror smooth on both sides and up to 3 in. thick, is manufactured by Forest Fiber Products Co., Forest Grove, Ore. The panel product will open up a whole new field for hardboard in cabinet doors and furniture where smooth surfaces are needed on both sides, according to the company.

Operating data from 24 separate sources, such as tachometers, thermocouples, resistance thermometers, carbon dioxide indicators, can now all be logged on a single circular chart. Fielden Instrument Division of Robert Shaw-Fulton Control Co., 2920 N. Fourth St., Philadelphia, is introducing the recorder, which makes traces in six colors. Through an adaptable timing mechanism, each quarter of a standard circular chart can be made to correspond to an 8-hour, 24-hour, or 7-day period.



# Here's what Micarta

### is doing for steel production!

A leading steel producer wanted a roll-neck bearing material that could cut power costs, increase tonnage and hold more accurate gauge. Now, thousands of MICARTA roll-neck bearings are performing efficiently in steel mills throughout the country.

#### What can Micarta do for you?

Your problem may be as simple as noise control or electrical insulation. Perhaps you need a material that resists moisture, that is lubricated with water, that is both light and strong, that wears smoothly, slowly. Whatever your problem, your industry, or your application investigate the qualities of versatile MICARTA. For prompt and complete information about MICARTA fill out the coupon below.

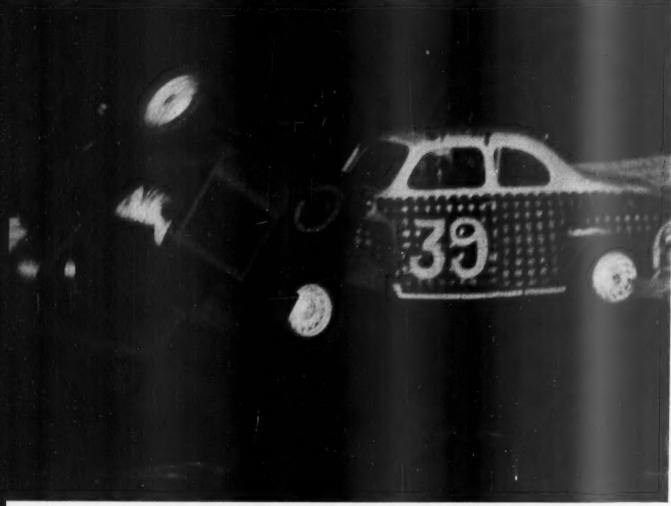
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### ENTERTAINMENT



Few get rich on it-or even healthy-but millions, including Detroit automakers, are fans. High-

# Stock Car Racing: "A Smash Hit"



PARTS BUSINESS is still dominated by small firms. Bob Osiecki, of Lyndhurst, N. J., has made a national reputation out of trans-



forming stock engines—old or new-into championship racing engines. Driver Frankie Schneider (in T-shirt) is steady customer.



speed pile-ups provide thrills.



3-million customers . . .



. . of all ages, wince . .



. . . stare, and are wowed.

# But Will It Last?

In Rome, they had gladiators. In the U.S. today, where man's hero worship has more mechanical overtones, they have stock car races.

This peculiar brand of jalopy-like auto racing (BW-Aug.12'50,p23) has in the last three years changed the look of a considerable amount of American acreage. Pastures have been turned into bulldozed tracks; stadiums have risen on the outskirts of citics. And the night, which should be filled with music, has echoed to the sounds of screaming tires, roaring engines, and the grind and smash of metal on metal.

• In Top Five—Nobody knows for sure just how much the phenomenon that is stock car racing has grown in the last three years. There are some guesses, though, that this year more than 4-mil-

lion people will spend more than \$75million on auto races of all types. That would make the sport one of the top five in paid-attendance standings.

About the only guide to how much of this race-watching involves stock cars are the figures of the National Assn. for Stock Car Racing, Inc. (NASCAR). This is a Daytona Beach (Fla.) group set up to establish safety and mechanical standards for the sport and to pull all its promoters under one roof.

Last year NASCAR sanctioned 1,029 races on 93 tracks, with prize money paid to drivers totaling \$1.2-million. That compares with a total of only 87 races on 25 tracks in 1949 and an aggregate purse of only slightly more than \$180,000. Neither NASCAR nor anyone else has figures on the hundreds of

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And a \$250.00 Elliott Addressing Machine will automatically feed and address your forms at a speed of 125 different addresses per minute.

Your employees will thank you for giving them quiet, fast, light work that they can do with clean hands.

And your \$ savings on labor and material will amaze you.



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When they folded everything by hand, Suzy had to take a lot of time out from her regular office work to do the job.

Three or four times a month there were thousands of sales letters, bulletins and announcements to take care of and Suzy could do only about six hundred per hour. Then someone told her boss about the Pitney-Bowes folding machine. When he found out how much time, trouble and expense it could save, Suzy's hand-folding chores were gone, forever.

HAND-FOLDING is a dull, dreary, time-consuming chore ... a dumb job, to put it bluntly. No job for a selfrespecting human, but a push-over for the Pitney-Bowes FH Model. Every office, even the smallest, can

profitably use one. With semi-automatic feed and electrically driven, it is fast, accurate and easy to operate; can make two folds at a time; can double-fold up to 5,000 sheets an hour; makes eight different folds in sheets from 3 x 3 up to 81/2 x 14 inches, and of many different paper weights. Folds sheets stapled together, too.

In only a few seconds, by simply moving two knobs to adjust for the folds you want, the FH can be set for any job.

It is not much larger than a standard typewriter, and it costs less! A great little worker, it quickly pays for itself. Ask the nearest PB

FM folds up to 19,000

#### office to show you-or send the coupon. Fully automatic model sheets per hour.

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nonmember promoters. But it seems logical that their growth has been just as big, and that maybe upwards of 3-million people will watch stock car races this year.

• Detroit Reacts-This amounts to a tremendous audience, a fact that more and more people, quite apart from the promoters, are wakening to. In the last year, for instance, Detroit's automakers have been paying a great deal more attention to stock-car racing than they used to-as a way of catching customers for their cars.

The auto industry, of course, has watched midget races and stock car races for years, but mainly as a sort of proving ground for engineering developments. In the early 1900s howeverthe days of the famous Glidden crosscountry tours-manufacturers delighted in pitting cars against each other to prove them to customers. Henry Ford's '999" probably set more people to scuffling for Fords than any barrage of ads could ever have done.

Now the return of stock car racesthough in a vastly different form-has quickened Detroit's publicity pulse

· Special Parts-Race drivers can now buy a souped-up, lightened Hudson which is generally unavailable to the public. This highly modified car, factory-produced, has been winning steadily in late-model races, a fact that Hud-

son has carefully publicized.

Oldsmobile now makes six special kits of speed parts for race drivers (automobile makers catalog these as "export kits" or "maximum duty" parts to get around racing rules that late-model cars can include only equipment listed in manufacturers' catalogs). And this year the new Olds will be 8-in. lower than the current model, a boon to racers who favor Olds, but who have usually had to watch the Hudson Hornet finish in front.

Lincoln and Ford both make special racing parts, with the Lincoln equipment including parts from the Ford F-8 truck. Dodge, which has been having good luck on the tracks lately, is a likely bet to come along with some

race-inspired modifications.

Aside from the big manufacturers, there are literally hundreds of small firms specializing in speed parts. Some of these are strictly for racers, others for a more general market. Usually, these parts are sold by mail order or through auto-accessory shops.

• It's a Business-For all its size, stock car racing is no quick whirl to riches. Profits, for the promoter, are far from spectacular. For the driver, they're

often nonexistent.

To get into business with a reasonably sized permanent track, a promoter has to figure on an outlay of about \$100,000. That's what it will cost him



# Squeezing the bottle does half the work

Just the fact that these bottles can be squeezed makes these background illustrations possible. Hair dye is applied, window cleaner sprayed, insecticide atomized—without pumping, dipping, pouring, or spilling. Finger pressure on the bottle does it all.

Squeeze bottles made of BAKELITE Polyethylene plastic are working a big change in packaging—finding new jobs, making new sales. They have varied and graceful shapes. When transparent or translucent, they show the contents level. Their colors are bright and attractive.

If dropped, these tough, flexible bottles won't break. They won't leak. They

withstand contact with chemicals. They don't absorb dirt, and won't lose their shape or color under normal treatment.

BAKELITE Polyethylene has scores of other packaging uses . . . as sheeting and âlm, as coatir.gs for paper, foil, and cloth, or melded into containers, closures, and dispensing devices.

Why do we advertise a material that's in short supply? Because we know that it takes time to perfect your packaging ideas . . . Because we have a material worthy of your consideration . . . Because by the time you have completed your product development, we will have made substantial progress with our extensive plant expansion program.

Insecto-Mist Bottle by Injection Molding Co., Kansas City, Mo. One-stroke window cleaner and Inecto Color Quick bottles made by Plax Corporation, West Hartford, Conn.

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#### Power Consumption 113% above '42 in booming Kansas City

One of the most reliable barometers of industrial growth is electric power consumption. And the figures prove Kansas City is booming.

In the ten-year period since 1942, the Kansas City Power and Light Co. residential electric consumption has increased 146%. Increase in commercial use totals 173%, industrial consumption is up 113% and other uses are up 25.1%.

Why these huge increases? Because virtually every industry and commercial enterprise depends on electric power for its life and growth.

Yet, electricity can only be useful when it is transmitted through thoroughly dependable wires and cables, engineered to the application involved.

In providing industrials, contractors and utilities, such as Kansas City Power and Light Co. with such wire products, Rome Cable Corporation is one of the few manufacturers who offer its customers complete engineering and research serviceone of a very few with an inspection routine entirely independent of sales or production. "The Story of Rome Cable Corporation" tells how this independent company quickly grew to be a leader in its field. Send for your free copy today.



to buy the land, build a grandstand, and put up concession stands, a durable fence, and the track. If he rents an already built stadium, the initial outlay will probably run to about \$30,000 -the cost of converting the field to racing. This, plus a yearly rent of about \$15,000, amounts to \$105,000 over five years, or approximately the cost of a new track amortized over the same period of time.

One successful eastern track last year grossed about \$150,000. Of this about \$135,000 came from gate receipts, the rest from concessions. Expenses, of which the biggest items were prizes and appearance money to drivers (\$40,000), advertising (\$20,000), and wages (\$15,-000), amounted to an over-all total of \$835,000. That left a pretax profit of only \$15,000 on the year's opera-

· Slim Pickings-Drivers find even these slim pickings hard to match. Only a handful of them, working seven days a week, manages to make upwards of \$15,000 a year. Frankie Schneider, one of the top-notch stock car drivers, can pretty much count on a \$15,000 to \$18,000 net take in prize money. Schneider owns his own cars. which means he can keep the 60% of his winnings that would normally go to a backer. But ownership also means he has to assume the responsibility for repairs and hauling-which may take just about all his breathing moments away from the track.

A somewhat larger group of drivers manages to break even, winning just about enough to keep their cars in parts and fuel. But the losers-those who don't even make expenses over a season-are the biggest group of all.

• They Squawk, But-At a country track, often no more than a bulldozed strip with only piled topsoil separating the cars from the spectators, a driver can race his head off all night to walk away with a fraction of a total purse of \$150. He can do considerably better than this, of course, at a bigger track. An average purse for a seven-heat evening at a money-making stadium is about \$1,500. (Promoters have a knack of fixing purses just low enough so that drivers may squawk, but they won't balk.)

For really big events, a late-model race, for instance, with an attendance of maybe 10,000 people, the purse may go as high as \$10,000. There aren't many of these, however, and to win a driver has to beat out the stiffest sort of competition. If he's out of the money, he has nothing to show for the night's work-except maybe a smashedup \$1,500 investment.

• The Cars-The junk yard is still the maternity ward of stock car racing. Whether a driver puts \$75 into a jalopy or \$1,500 into a modified stock



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car, he's likely to start his investment with a scrapheap relic.

Actually, there are three principal classes of stock cars in races today, and none is a stock car in a true sense. Quite apart from the safety equipment that has to be added, modifications have to be built into production line models to enable them to take the grueling beating of night-after-night racing. (Detroit engineers estimate that the punishment from one 500-mi, race is the equal of 100,000 mi. of pormal car driving.)

Modified stock cars are expensive, costing at least \$1,500. The car is usually a 1938 or 1939 Ford. The engine is rebuilt, and the bore and stroke increased, and special carburetors, high compression heads, and other equipment added. The result, in some cars, is a horsepower double that of the original.

Late-model cars are the closest to the pure breed. This class covers models up to four years old that are equipped only with those parts that are available through the manufacturer's catalog. Special power-increasing gadgets, apart from the "standard" catalog items, are outlawed.

Sportsman's stock cars include the true relics, the junk heaps that may be bought and fixed up for as little as \$75 to \$100. The cars are most often Fords with the vintages of the 1930s. They must be stock to the eye, which means that whatever changes are made have to be made in spots where they don't show. Anyone with a driver's license and the cash to buy and fix up one of these cars can qualify as a full-fledged racer—provided he can coax the car to the track.

• Slowing Down—Although the figures don't show it, there is a feeling among some people close to stock-car racing that the sport has made its big splash and from now on may be rippling out.

Certainly, there seems to be a leveling out of attendance in areas that have had stock car racing for several years. Midweek racing now goes over well only where stock car meets are still a novelty.

All this has brought some promoters to thinking about changing the pattern of their shows. They figure something new may be needed if they are to escape the doldrums.

One idea has been to inaugurate team races, which give the fans a chance to indentify themselves with a stable group of skilled drivers. The scheme has worked well in England, where motorcycle teams have moved from city to city, racing in a sort of league pattern.

The most successful gate booster to date has been the international race. It pits small foreign cars against the American "beasts." Other promoters have resorted to the more standard gimmicks—fireworks and special stunts.



## Property Accounting Affects Profit

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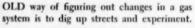
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### UTILITIES







NEW computer does it the quick way. In effect, it's a working model of the system.

### Pipeline Planning Made Easy

The average city's gas distribution system—a network of small pipelines—is so staggeringly complex that utility engineers long ago gave up trying to figure out its peculiarities mathematically. A single problem in pressure variations might take years to work out on paper. Hence, utility men have taken to mixing a pinch of mathematics with a handful of educated guesswork whenever a problem has come up. If the answer has turned out to be wrong, they've written the loss off as an occupational hazard.

The analyzer pictured above (right) is designed to end this hazard. In effect, it's a working model of a city's or suburban area's gas pipeline system. The flow of electric current through the machine corresponds to the flow of gas through the pipeline network. An engineer running the analyzer can work out problems in gas distribution that nobody ever tackled before except by guesswork.

Its official name is the McIlroy Pipeline Network Analyzer. It was developed by Dr. Malcolm S. McIlroy, assistant dean of Cornell University's College of Engineering. The first model built (at a cost of about \$62,000) will be used by Ohio Fuel Gas Co.,

Columbus subsidiary of Columbia Gas System, Inc.

• Problems—To understand why Columbia Gas would be willing to pay that much for an analyzer, you have to understand the frustrating problems involved in running a gas distribution system.

First of all, the system is incredibly complex. There are pipes running to every gas-using building in the area. Pressure throughout the whole network—with endless variations of pipe size, connections, and the like—must be at least roughly even.

To complicate matters further, you have to keep making changes in the system. A new housing development is built; a new industrial plant goes up; an older section of town deteriorates and slows down on its use of gas. Hence, you're continuously adding new pipelines; replacing small pipes with bigger ones, big pipes with smaller ones.

And every time you make a change, you have to arrange it in such a way that it doesn't upset pressure conditions in the rest of the system. You have to calculate the correct size of pipe, the best place to hook it into the existing network. If you make a

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Steelcase engineering and planning makes it possible to seat 25% more employees in a given area. Users report work output has increased as much as 35%.

Because Steelcase desk tops, drawers and pedestals are interchangeable, you can meet changing job requirements immediately. In less space than normally required, you gain increased filing capacity.

These factors—plus money saving Steelcase lifetime construction—are the reasons why many leading national organizations have consistently standardized on Steelcase. Ask your local Steelcase dealer for their names.



Look for your Steelcase dealer in the "Office Equipment" classification of your phone directory.

For new ideas in office planning, write for "Tooling Up Your Office"
METAL OFFICE FURNITURE COMPANY · Grand Rapids, Michigan

STEELCASE
Business Equipment



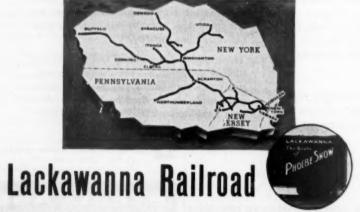
# Your assurance of fast, safe and dependable service when you ship Lackawanna!

Whether carload or less-carload, from the moment your shipment is received by Lackawanna until it arrives at its destination it is subject to LFT!

Lackawanna Follow-Through knows when your shipment has left...knows where it is while enroute...knows of any unexpected schedule interruptions and is prepared at all times to give you such information.

LFT freight representatives are stationed in key cities along the Lackawanna mainline. Full reports covering the movement of each car are transmitted daily to Lackawanna's complete coast-to-coast network of traffic offices. Regardless of whether your car is in a terminal or in transit, you can find out about it promptly simply by contacting the LFT man in your area.

It's Lackawanna Follow-Through all the way! No mystery, no guessing, no groping. Whatever your transportation problem may be, you can depend upon LFT to help you solve it!



SHIPPERS WHO ARE IN THE KNOW, CHOOSE THE ROUTE OF PHOEBE SNOW

"... can tell them the best way to maintain pressure during the winter ..."

PIPELINE PLANNING starts on p. 74

mistake, you can create pressure problems miles away. Resulting losses can run high.

• Guinea Pig—McIlroy's analyzer acts as a sort of guinea pig on which engineers can experiment before they start digging up a street. By watching the action of electric current flowing through it, engineers get an accurate calculation of how gas will move through their pipeline system given any new situation.

At the heart of the analyzer are three "network section" panels. These are covered with electric plugs, laid out in the form of squares to simulate city blocks. By hooking electric wires onto these plugs, engineers can set up an electric circuit on the panels corresponding to the city gas flow.

Behind these panels are banks of old-fashioned tungsten filament lamps, which act as resistors—just as pipelines resist the flow of gas. Each resistor corresponds to a certain length and size of pipe.

Another panel, called the "source control" panel, measures and regulates the inflow of current from an electric generator. This simulates the gas regulator stations, which pick gas up from big transmission lines and pass it into the city network.

Two more panels measure the rate at which gas is burned. There are dials to represent units of consumption—blocks of city homes, big factories. Behind these panels are banks of vacuum tubes that "burn" electric current just as consumption units burn gas.

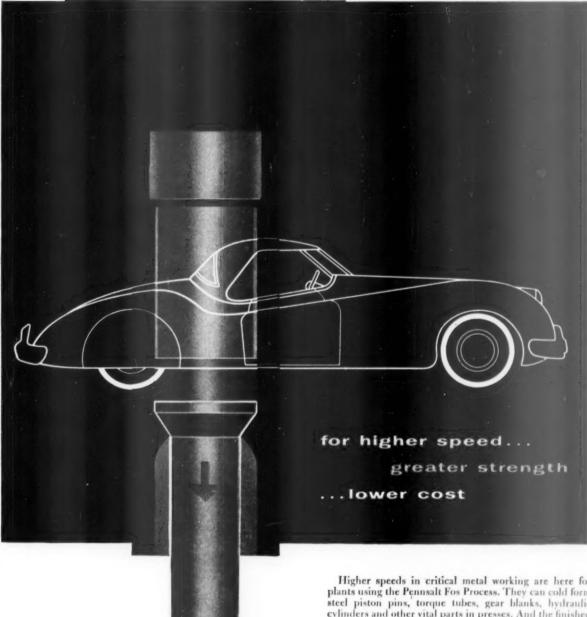
In the center of all this is the control section, containing a map panel. An engineer can plug in at a particular street corner on the map and measure the voltage—gas pressure—there. He knows in an instant how much it's affected by changes in the system.

 Other Jobs—According to Columbia Gas System engineers, the analyzer can do all sorts of jobs that would otherwise have been largely matters of guesswork:

 In the event of an air attack or some other catastrophe that destroys part of the city's gas system, engineers using the analyzer can quickly figure the best way to reroute the gas.

 The analyzer can tell engineers what parts of the system they can take out for repairs or improvements without interrupting service.

 It can tell them the best way to maintain pressure during the winter months, when demand hits its peak.





Pennsylvania Salt Manufacturing Company

Higher speeds in critical metal working are here for plants using the Pennsalt Fos Process. They can cold form steel piston pins, torque tubes, gear blanks, hydraulie cylinders and other vital parts in presses. And the finished products are tougher, stronger, better able to withstand the demands of higher speeds and harder wear than parts made by conventional methods.

The Pennsalt Fos Process is now being used in automotive, tube, wire drawing and ordnance plants. The process includes a new Pennsalt lubricant and a proven method of locking the lubricant to the steel. The Fos Process insures the smooth and rapid flow of cold steel through the die, even at extreme pressures.

Practically all of the original metal can be utilized with Pennsalt cold extrusion techniques . . . work cycles can be reduced . . . and over-all production speeded up. Superior physicals can be obtained from carbon steels, along with a better, smoother finish. Multiple draws without interim recoating and annealing, and greater reductions per draw are now practical.

Is Fos Process practical for your plant . . . your products? Send us details of desired application, or blueprints of products. We'll be glad to evaluate possibilities. Metal Processing Department, 381 Widener Building, Philadelphia 7, Pa.

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# Burroughs Sensimatic

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For greater savings in just about every accounting operation, take a good look at Burroughs Sensimatics. These versatile accounting machines handle jobs faster, with greater accuracy. And they are so easy to use that even beginners can quickly do expert work. No wonder so many famous firms around the world turn to Burroughs Sensimatics to save time and money. You can make savings, too—just call your Burroughs branch office, listed in the yellow pages of your telephone book, or write Burroughs Corporation, Detroit 32, Michigan.

WHEREVER THERE'S BUSINESS THERE'S

## Burroughs



#### CANNON MILLS

This leading firm in the textile industry has used Burroughs equipment since the early 1900's. Today Cannon uses the Sensimatic to handle accounts receivable and related reports, and lists speed and ease of operation as outstanding Sensimatic features.



#### THE STETSON SHOE COMPANY

The Stetson Shoe Company, manufacturers of fine foot-wear for men, find the Sensimatic "extremely fast" on accounts receivable. "Operators learn to use the machine very easily and quickly."

#### BAUSCH & LOMB OPTICAL CO.

Entering its second century of service, the Bausch & Lomb Optical Company, makers of the finest quality optical products, finds the flexibility of the Sensimatic Accounting Machine ideally suited for handling its world-wide accounts receivable.



#### THE GATES RUBBER COMPANY

Greatly increased efficiency in the posting of accounts receivable has been achieved at The Gates Rubber Company, world's largest manufacturer of V-belts, with Burroughs Sensimatic Accounting Machines.







WEIGHT: Bethlehem Pacific workers load steel tower to test its strength.



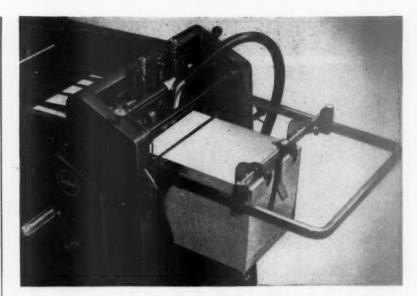
MEASURE: An engineer with a transit checks how tower bends under punishment.

### Testing a Steel Tower

"Testing to destruction," Bethlehem Pacific Coast Steel Corp. calls it. Before you start manufacturing a certain type of steel transmission tower, you build a full-scale guinea pig and start breaking it down. You hang weights on it, attach chain blocks to it, wreuch it, twist it, bend it. Finally you dismantle it to see what has happened to its various members.

This can tell you two things: (1) Certain parts may be too weak; and (2) others may be too strong—and thus more expensive than necessary.

The prototype tower above is the guinea pig for a series of 1,050 that Bethlehem Pacific will build for the Bonneville Power Administration.



### Good Impressions Start Here

It's the automatic feeder on a Davidson Dual... and a mighty important part of the press it is. Nimble fingers lift the paper by suction... one sheet at a time... carrying it to the conveyor mechanism for automatic correct positioning before entering the press. It's almost human... but much more than human in accuracy and dependability. In fact, it can't make a mistake... won't permit more than one sheet at a time to reach the conveyor. If two or more sheets stick together they are automatically deflected into a tray below. With all its extreme precision, this feeder is simple, sturdy, has no delicate coils or solenoids, and seldom requires service. It's just one more reason why you're certain of better printing on a Davidson Dual... the kind that makes good impressions on your customers.

For 24 years the Davidson Feeder has had a reputation for the utmost in accuracy and dependability. These same qualities are matched throughout the entire press...in accurate register, quick starting, easy adjustment, full ink coverage, positive stripping and stacking, simple operation, high production speed, and low cost.

If you do printing you'll want Davidson quality results... fine halftone reproduction, sharp, crisp line work, excellent multi-color printing. And the

Davidson Dual is the only press that prints by either offset or relief... reproducing from paper or metal offset plates, type, electrotypes, rubber plates and Linotype slugs...and does both dry offset printing and embossing in one operation. So, remember ... whatever form of printing you want to use...

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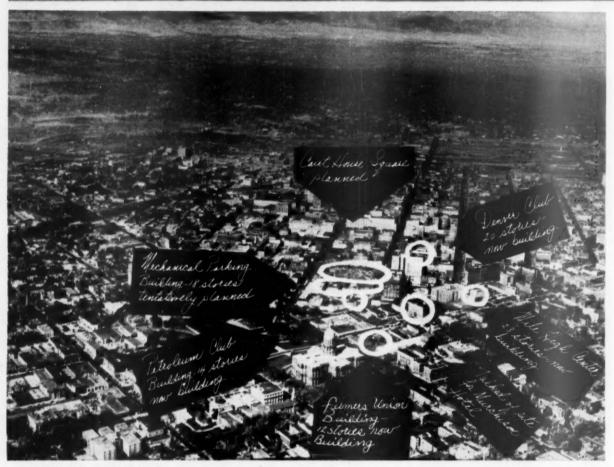


Davidson Sales and Service Agencies are located in more than 60 principal cities.

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BUILDING BOOM suddenly gets under way in downtown Denver as these major projects are pushed toward completion.

## Denver's Commercial Building Surge

The city of Denver, Colo., has been drowsing in the shadow of the Rocky Mountain's highest peaks for nearly 100 years. It has little industry, no booming natural resources and a few large old fortunes that hardly ever are put into the city's economic development.

"What keeps this town going?" a visitor once asked a newspaper man.

"I've been on the paper 25 years," was the reply, "and no one has ever told me."

But Denver today has more business construction going on than perhaps any other U.S. city its size.

Webb & Knapp, Inc., one of the nation's largest and shrewdest real estate developers, says it is investing more money-eventually \$35-million-in Denver than in any city except New York. Indeed, says a W&K spokesman, they wouldn't think of putting that much

money in any city except New York.

• Near the Top—Only three cities in the country—New York, Houston and Pittsburgh—have built in the postwar era 1.5-million sq. ft. or more of office space (BW—Dec.6'52,p86). New rental office space built or planned for Denver totals nearly 1-million sq. ft. If you add to that owner-occupied space and a new hotel, Denver's new business space will shoot way past that benchmark.

By contrast, until early this year, Denver's rental office space totaled about 1.9-million sq. ft.

Why all the development?

• Justing Busting Out—In simplest terms, it's because you can't hold back a city's development forever. Sooner or later it reaches a point where it has to expand. The big surprise about Denver is that apparently the forces of expansion were first recognized by outsiders. There has been practically no office-building or other business construction in Denver for about 20 years. Two years ago there was considerably less private office space than in 1935 (BW—Mar.10'51,p.86).

Population grew slowly. Even after the war, heavy industry stayed away; the city is too far from major markets. Most of the old families had built wealth and prestige in mining, sugar, and trading; they were not interested in bringing new enterprises that would stand the region on its head.

• Advantages—But things were stirring under the lethargy. Denver is blessed by climate and geography. The one makes it a prime tourist center; the other an important transportation and distribution point—more than half of the city's employment is in those two categories. Tourism and conventions account for about 7% of Denver's in-



CITY'S SKYLINE, for a long time static, will be radically changed. Local capital is getting into the act at last but . . .

## Is Started by Outsiders

come. This would grow if more hotel space were available.

Denver slowly became the seat of regional offices of national companies. Shell Oil established a research center. United Air Lines made Denver its main operations and traffic base. Denver dominates the mountain states; uranium strikes, oil and gas explorations even hundreds of miles away brought steadily increasing demands for new offices in Denver.

Mining in the Denver area declined. Now Colorado's commissioner of mines estimates the state's 1952 uranium production alone at \$50 million. Right after the war uranium mining employment was 300; now it's about 5,000.

 Outsiders—The lid on office-building construction stayed on temporarily after the war, despite the rising pressure.
 One reason was that the government moved into a war-built ordnance plant on the outskirts, freeing some 250,000 sq. ft. of space downtown. But the promise of Denver as a "managerial" city and potential oil and gas center was too good to be resisted by outsiders such as Webb & Knapp and John D. and Clint Murchison, Jr., who represent an immensely wealthy Dallas family. They brought in the capital that the old families wouldn't risk. An expansion fever suddenly took hold.

It became contagious. Younger, more progressive local interests, realizing that rents from the new offices would flow to outsiders, got into the act. Established Denver businesses laid plans for new buildings for their own use.

Here are the major projects that are now under construction or are definitely scheduled:

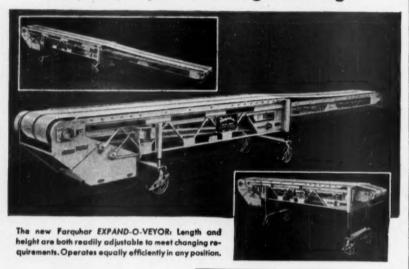
Webb & Knapp-The Mile High Center, a 23-floor, \$15-million office building with about 450,000 sq. ft., plus parking space; a 30-floor department store-hotel building on the old Court House Square; a \$500,000, two-story-plus-basement office building with 37,500 sq. ft. of space that might be increased to a 10-story building. In addition Webb & Knapp has plans for a possible 18-floor mechanized parking garage.

Murchison—A 20-floor, \$7-million building of which the Denver Club will occupy the top four floors, the remaining 150,000 sq. ft. to be rental space. The Murchison interests, too, have been investigating the possibilities of a hotel

Oil Building Corp.—The Petroleum Club Building, 14-floor, \$3.5-million office and club building with 140,000 sq. ft. of rental space. The club will occupy the top floor. A savings and loan association whose president also is

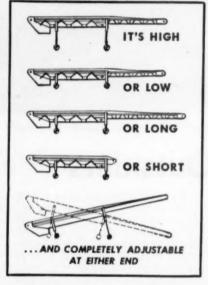
## Where can you use this new FARQUHAR EXPAND-O-VEYOR?

Completely adjustable in height and length!



HERE's the new Farquhar Expand-O-Veyor—literally, the "conveyor with the two-way stretch." Use it at its maximum length and height settings one day; move it to another part of your plant and use it at minimum settings the next day. Or, operate it at any combination of height and length positions you desire. Use it in loading and unloading trucks—keep one end fixed and shorten or lengthen the other as your truck becomes full or empty. The versatility of the new Farquhar Expand-O-Veyor makes it suitable for a wide variety of material handling problems—especially where space and working requirements change often.

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"... hometowners raged at the price and because they didn't want to lose their park . . ."

GROWING DENVER starts on p. 80

president of the building corporation will lease the ground floor.

National Farmers Union—A 12-floor, \$2-million office building with 100,000

sq. ft. of rental space.

Owner-occupied Buildings—Safeway
Stores is putting up a \$10-million regional distribution center; Sears, Roebuck, a \$3.5-million retail store and
warehouse; Denver Dry Goods Co., a
\$1.5-million semi-suburban store.

With the exception of the owneroccupied structures, all of these buildings will go up in an area approximately 10 blocks square smack in the middle of town (nicture page 80)

of town (picture, page 80).

Normal Growth—The men behind the building spurt deny that it's a boom. It's just a long-delayed normal growth, they say. As one puts it:

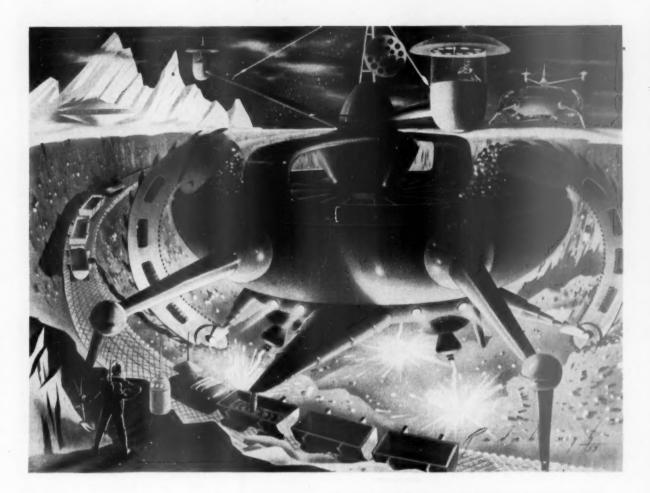
"Denver has been building 9,000 homes a year and the metropolitan population is estimated at 635,000. But down town what did you see? It looked like a town of 100,000. Even after these new buildings, we shall have only the normal look and facilities of a town of this size—even at that I'll bet office space will still be at a premium."

Although there are many hands turned to the building now, William Zeckendorf, president of Webb & Knapp, more than anyone else, kicked it off. Why the company got interested in Denver, with its apparent lack of future, is a bit obscure. A Denver real estate broker brought to W&K a proposition to acquire a block-square parcel of Denver land and, after studying the situation, the New York company moved.

In 1945 W&K bought the site proposed, a 100,000-sq. ft. block where the court house used to stand. At that time the property was a park. Hometowners raged for two reasons: (1) Many thought the price—\$818,000-was too low; (2) they didn't want to lose their park. What followed, however,

made them madder than ever.

• Delays—Under the sales agreement, Webb & Knapp was to start work on a building costing not less than \$1-million within a year of title clearance, or forfeit \$25,000 annually until building did begin. Litigation over the sale delayed the real estate firm until late in 1949. Then the Korean war brought restrictions on construction. Meanwhile, W&K was unable to nail down commitments for the proposed building. The square was turned into a parking lot and, beginning in 1951,



### When atomic machines man the iron mines of Mars...

precision National Oil Seals will protect their performance

Machines of new and daring design will be needed when man taps the iron deposits of Mars. Smoothly efficient despite sub-zero temperatures and whirling sand storms, they will stride across wastelands, locating ore electronically, mining and processing the valued metal. And, as today, their vital moving parts will rely on oil seals and O-Rings for protection and performance.

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National pioneered oil seals and O-Rings, and today is a leader in the field. We have over 2,500 different standard-design seals for all types of mechanical assemblies; we can modify or design new seals to meet exact specifications. The nearest National field office can give you complete information and engineering help.

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NAME				-

"... another investment to make sure the store will move in ..."

GROWING DENVER starts on p. 80

W&K paid its forfeit. (According to some reports, however, it pulled in more than that amount in parking revenues.)

Before this, Webb & Knapp—possibly seeking local cooperation and sympathy—had formed a partnership with Claude K. Boettcher, local magnate who headed the Ideal Cement Co. and controlled the Brown Palace Hotel, Denver's most noted hostelry. Boettcher pitched into the deal another city block, opposite the Brown Palace, and announced plans late in 1952 for the 23-story building.

This didn't end the criticism of W&K's failure to develop the court house square site, and soon even the local angle collapsed. Webb & Knapp wanted to build the 23-story building of glass, steel and aluminum. So Boetteher, mindful of his cement interests, dropped out. W&K then formed a partnership with George Fuller Construction Co. for the Mile High Center (which originally was to have been called the Boetteher Center).

• Full Steam Ahead—So, with the hope of obtaining local participation ended and other outside interests (the Murchisons) becoming ever more serious about Denver, Webb & Knapp started whipping together firm plans for the court house square property.

If negotiations are successful, the Statler chain will operate the hotel, which will have from 700 to 1,000 rooms. The department store will be Daniels & Fisher, which now occupies an old building on the edge of the downtown area. It required another W&K investment in Denver to make sure that the store will move in.

Right from the start W&K had planned a combined department store and hotel. The first department store lined up backed out, and that was one reason for delaying the building plans. Now Webb & Knapp has bought control of Daniels & Fisher at a probable cost pretty close to \$1-million.

• Banker—The man who put over the D&F transaction for Webb & Knapp, and has had a finger in the Denver development almost from the start, is Arthur G. Rydstrom. In one sense he's another of the outsiders who have sparked the building explosion. In 1948 he went to Denver from New York where he had been a vice-president of Bankers Trust Co. He became Boettcher's right hand, apparently with the idea of helping to direct Denver growth. When Boettcher pulled out of the



### A CONCRETE ANSWER TO METAL PROBLEMS

Soon — more aluminum from Canada: A mile high in the Coast Mountains of British Columbia, these men have poured concrete footings for the towers of a transmission line such as you've never seen. This line is destined to carry aluminum production's basic requirement — electric power — to a great new aluminum smelting installation, the Kitimat plant of the Aluminum Company of Canada, Ltd. ("Alcan").

It is an extraordinary line. Its towers will face blizzards and gales such as no other transmission line has ever had to withstand. Its aluminum cables, reinforced with steel, are the largest ever spun. The more than a million horsepower that it is designed to carry will have to travel 48 tortuous miles, climb 5300 feet over a pass, and span gorges that exceed half a mile from tower to tower.

The last footings are in. Within months, power will move over the line to Kitimat, and with each 20,000 kilowatt-hours Alcan will produce another ton of aluminum ingot.

As distributor of Alcan aluminum in this hemisphere, the Aluminum Import Corporation is pleased to report that Kitimat is proceeding on schedule. Soon — more Alcan aluminum for defense, industry, farm, and home. Soon — more jobs for metal workers.



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### HOUGHTON 1001 Products to improve processing



### "Anchored" Oil Keeps Harpists Happy

We've never heard of an unhappy harpist, but then we don't know much about harps except how to keep them oiled so they sound celestial when properly plucked.

And there is more to keeping a harp oiled than meets the eye. It seems that under that fancy carving there is a fantastically *precise* piece of machinery. It's called the "action" and when activated it changes the pitch of the harp. Tolerances are  $\pm 0$ ", no "play" allowed, and there is high pressure—tension up to 2,000 lbs. is built up on the main bearings. What's more, "as delivered", harps are guaranteed to need no lubrication for 5 years.

There's nothing easy about that lubrication job, and that's where Houghton comes in. After consultation with the manufacturer, we recommended three lubricants: Needle Rust Preventive No. 12, Sta-Put 580, and Hi-Temp Oil 303. They do the job well—stay where needed—"anchored" to the action.

Maybe you don't even know how to hold a harp and will never need to oil one—but chances are good that somewhere in your process or product is a lubrication or protection problem, and the man to give you the right solution is the Houghton Man. He will bring the result of more than 80 years of industrial research. Why not call him now? Or write direct to E. F. Houghton & Co., 303 W. Lehigh Ave., Philadelphia 33, Pa.



Metalworking and Textile Processing Products . Lubricants . Packings . Leather Belting

combine, Rydstrom switched to Webb & Knapp as senior vice-president and financial adviser. Although now he has to watch all of W&K's interests, he keeps a special eye on Denver and this month became a director of Daniels & Fisher.

There are still strings to Denver's development. One is traffic congestion. Parking is tight and will get worse. Although Webb & Knapp is including parking areas in its building plans, not all the other promoters are following suit. Banking is another. The city has many small banks but no really big one. Reportedly, the loan limit to one customer is \$600,000 and that's another reason why outside capital has had to take over the expansion. Water supply available now will limit the population to about 700,000.

But despite the drawbacks, Rydstrom says "Our city is busting its bustle," and a spokesman for one of the other building interests says, "We're just getting back to where we ought to be."

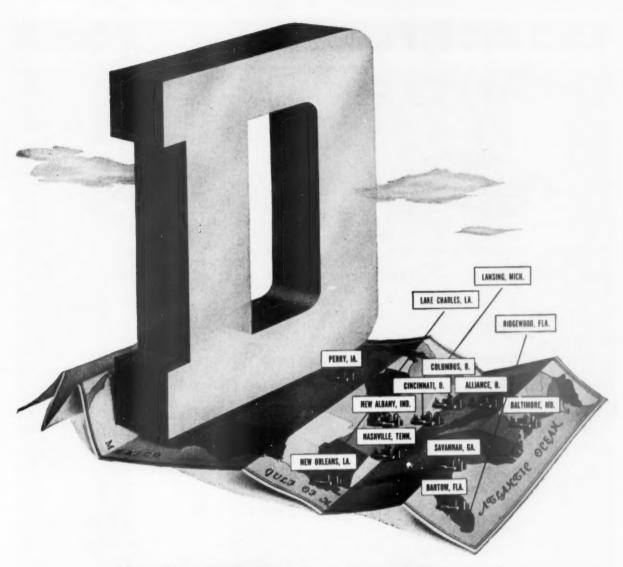
### **REGIONS BRIEFS**

Public Utilities Commission of Ohio will hold hearings next month on complaints from individuals, businesses, and civic groups in Toledo about passenger rail service between that city and Columbus, the state capital. State Sen. Raymond Hildebrand, of Toledo, says there's only one passenger train a day in each direction and insists that's not enough.

A 1-e-a-gal. boost in the Virginia gasoline tax may be submitted to next vear's session of the state legislature. The hike, from 6¢ to 7¢ a gal., is reported to be one of the recommendations of an interim study committee of the legislature. The proposal, which would make Virginia one of the eight top gasoline-tax states, is expected to run into strong opposition from many legislative leaders.

Atlanta, which hasn't had a major new hotel in many years, will get one next year. Owners of the 400-room Dinkler-Ansley have announced plans to build a 200-room addition, a new building adjacent to the present one and connected to it by an overpass. An assembly and banquet hall with a capacity of 2,090-larger than any now in the city-will be a feature of the addition.

State sales tax collections are running ahead of 1952, reflecting stepped-up business activity. A spot sampling for July shows collections in North Carolina up 9.7% over July last year; Alabama's up 7.1%; Kansas' up 3.6%.



### The Big "D" Continues to Grow...

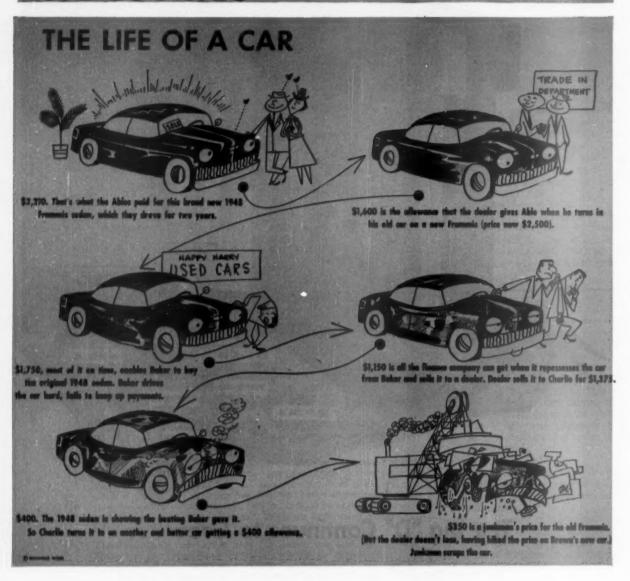
The Davison Chemical Corporation is keeping pace with the demands of industry and agriculture by building new plants, increasing facilities in existing plants, and developing new products and processes. In order to better service the highly important market of petroleum refining, Davison has just completed a new catalyst plant at Lake Charles, Louisiana. Another new plant, now under construction, is a triple superphosphate plant at Ridgewood, Florida. This plant, along with our recently acquired fertilizer plant at Lansing, Michigan, will play an all important role in producing the high crop yields necessary to feed the people of the world. Leaders in industry and agriculture know that the Davison "D" will continue to grow to match their requirements.



### THE DAVISON CHEMICAL CORPORATION

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### INDUSTRIES



## The Deals That Keep Used Cars Moving

Automobiles, like people, frequently lead eventful lives. A lot of the events are sales; the drawing above is fairly typical of the passage of a car from the factory cradle to the scrap heap grave.

All that selling has created the used car business, which collectively has made something like \$6-billion a year in sales since World War II. Between 9-million and 10-million used car sales are expected to be consummated this year, at a rough ratio of two deals for every one new car sale (page 27).

A very large share-which defies ex-

act statistical measurement—of used car sales are made, with their left hands, by new car dealers; that is, the franchised agents of the manufacturers. Nearly all new car sales involve the trade-in of an older model. To dispose of these, about 80% of the nation's approximately 42,000 new car dealers maintain their own used car sales setups. The rest wholesale the turn-ins to used car dealers.

• Independents—Nonetheless, there is a huge amount of business left for the people who deal exclusively in used cars and who have no permission to handle cars that are, technically at least, new. These dealers prefer to call themselves independent used car dealers; at their peak last November there were something like 20,000 of them, ranging from gyps and fly-by-nights to substantial and ethical businessmen.

The peak, though, is no longer with them. For months, both sales and prices have been sagging steadily below the comparable 1952 dates. The trade organ, Dealer News, says that volume will continue to drop, perhaps 20%

# Seals From Surgical Instruments

UE SE



Shortages are replaced overnight by smart shippers who use AIR FREIGHT!

Have you investigated this modern method of widening profit margins and beating competition? Now speedy Douglas transports provide short haul or coast-to-coast service... with up to box-car capacity. So if satisfied customers, low inventories, savings on storage, insurance, breakage, crating and handling are factors in your business, consult your local airline about air freight. Get the facts on how it may save you money!

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First in Aviation



## cut packaging costs 25%with GENERAL ENGINEERED CONTAINERS

Packaging six porcelain insulators in a bulky nailed crate was a time-consuming two-man operation at Victor Insulators, Inc., Victor, New York. Introduction of the sturdy, lightweight General Wirebound Box and the jig-assembly system shown here enabled Victor engineers to reduce packaging to a quick, efficient, one-man operation, cut packaging costs by an estimated 25%. And their customers benefited by the substantial saving in on-site uncrating time—now a matter of seconds, thanks to General Wirebound Design.

This is only one example of hundreds of packaging problems solved each year—at a saving—in General Box Company's two fine Industrial Packaging Laboratories. General packaging experts stand ready to help you cut costs, too. Write today for complete details.

Find out how other manufacturers are cutting packaging costs. Write for your free copy of "The General Box."



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Factories: Cincinnati; Denville, N. J.; 1805 Miner Street
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ENGINEERED SHIPPING CONTAINERS FOR EVERY SHIPPING NEED

- . Generalift Pallet Boxes
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more by the yearend if new car production is curtailed, 30% if it is not.

The drop has squeezed out a lot of reputable independents who were short on capital and long on cars bought at peak prices. It has also eliminated a great many of the fast buck gentry on the fringes of the business. The trade thinks that by November there may be only about 15,000 independents left.

· Organization-A good proportion of the survivors are trying to solidify their position. Way back in 1946, 100 Chicago dealers banded together to set up a code of ethics, enlist other and to them desirable dealers, and to provide the group with trade statistics and lobbying services. This outfit, the National Used Car Dealers Assn., has already mushroomed to 2,600 members, and expects to have close to 3,000 by the time its seventh annual convention opens in Biloxi, Miss., on Oct. 7. President Ray Hayward dreams rosily of a membership between 7,500 and 15,000 within three years.

A big part of NUCDA's job is trying to clear the trade of the gyp label that is so often tagged to it in the popular mind. Even the dealers chuckle, however ruefully, at the familiar story of the Eager Egyptian's used car lot.

A customer stormed in, shricking with rage over a car that was falling into bits. You guaranteed the car,' howled. "You swore it was in perfect shape-good for 50,000 miles. And already I've had to pay 400 bucks in repairs."

The Egyptian laid a genial hand on his shoulder. "Just a minute, friend," he said. "You forgot one thing.

· Drastic-The honest dealers are glad to see that the Egyptian and his ilk are being squeezed out by the constriction of sales. A lot of them wish, though, that the squeeze-out could be accomplished by less drastic means.

At that, the loudest squawks over prices are coming from independents who got into the business since V-J Day. These newcomers have seen the business only in bonanza days. Generally, their only problem has been in acquiring cars to sell. Selling almost anything on wheels was no trick at all. With the return of bitter competition, the newcomers are finding that they know only half the technique of their trade. The great majority of surviving independents are oldtimers, or people who were trained by oldtimers.

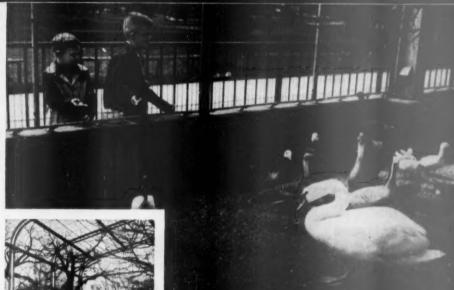
As for the oldtimers, many of them don't even quarrel with the drop in used car prices. One experienced dealer said: "Since the war prices have been madly inflated. Now they're getting down to something like sane levels. But the trouble is, new car prices are still much too high."

· Cozying Up-Criticism, inside the

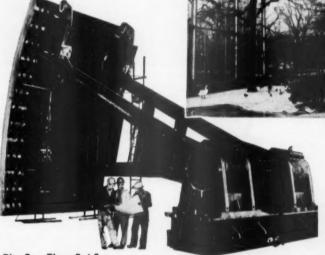
## Only STEEL can do so many jobs so well



Space Saver for Small Homes. Here is a combination that is being used extensively in many of the newest homes for large housing projects where kitchen space is at a minimum . . . a sink, refrigerator and range, all in one! This combination unit, which was fabricated entirely from U-S-S Steel Sheets, has been awarded a prize for versatility in design.



Strictly for the Birds . . . but very nice for spectators, too, is the screen of U-S-S Stainless Steel wire used to keep these prize exhibits safe in their cage at the Chicago Zoological Park. The stainless steel wire is strong, safe, and long lasting . . . but has the additional advantages of corrosion resistance and smart good looks. It will stay bright and clean-looking. Inset shows the enormous size of the screened-in structure.



How Big Can They Get? As this regulator gate for Garrison Dam, Bismarck, N. D., indicates, the steel components that go into the construction of a modern dam seem to be getting bigger and bigger. This one, fabricated and erected by U. S. Steel, is 18 by 24½ feet and is believed to be the largest ever built for high head, low level service. There are three 200-ton gates like this in the dam.



This trade-mark is your guide to quality steel.



Shown are 921/2-ton Stratojet bombers.

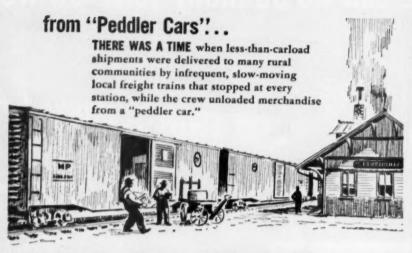
of the building has one opening 528 feet wide and another 265 feet wide, each as high as a six-story building. More than 13 million pounds of U-8-8 Steel were used in building the hangar.

UNITED STATES STEEL

For further information on any product mentioned in this advertisement, write United States Steel, 525 William Penn Place, Pittsburgh, Pa.

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MISSOURI PACIFIC's Train-Truck Eagle Merchandise Service speeds deliveries of less-than-carload shipments at hundreds of stations along our 10,000 mile system... offering shippers the advantages of rail and truck service in coordinated schedules.



trade, usually comes from the other side. Traditionally new car dealers have derided the independents as a pack of undercapitalized, parasitic hucksters, whose high-pressure tactics have discredited the whole auto industry. Since the war, the new car dealers have been becoming more friendly, finding that the independents can serve as a valuable safety valve.

The valve factor is inherent in the complex merchandising structure of the auto industry, and in sharp, often localized, variations in customer tastes and

prosperity.

A new car dealer has several reasons for needing sudden outlets. With almost every new car sale, he gets a used turn-in, some in fine shape (clean cars, to the trade) and some far gone in senility. Industry dogma is that he must get rid of the turn-in within 30 days; otherwise he's in for tied-up capital trouble.

Chances are that, if he is one of the 20% who have no retail used car outlet of his own, he will wholesale the turn-ins to an independent. The size of his mark-up depends on a whole batch of factors, including skill at horse trading. Much depends on the proportions of clean cars to heaps or unpopular makes in the batch he is selling.

Even if the new car dealer has his own used car lot, he may still have to resort to wholesaling in order to stay inside the mystical 30-day turnover

limit.

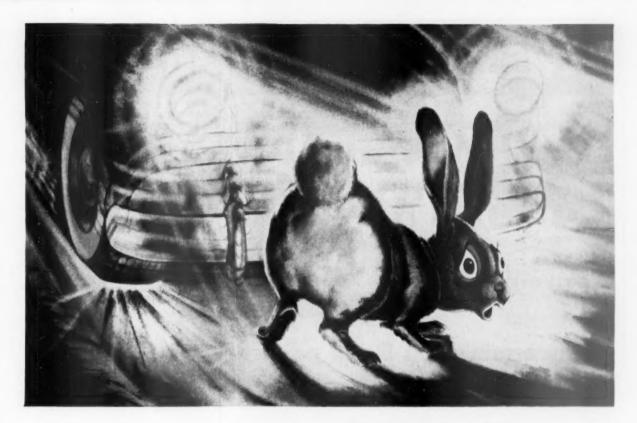
• What Is "New?"—Paradoxically, the vagaries of new cars create another reason for the franchise dealers to cuddle up to the independents. Manufacturers compel their dealers to accept certain quotas. Frequently, these are impossible to move because of local conditions, or because the particular make just hasn't caught public favor. In that case, the franchise dealer falls back on the independent to save his capital position.

The deal hinges on the fact that a car ceases to be new as soon as a buyer takes title. The word has little to do with lack of mileage or wear. The new car dealer, swamped with inventory sells his excess cars to a used car dealer for as little as \$25 above factory list. In extreme cases he may even take a loss to get out from under. That leaves the independent with a batch of cars that he cannot legally call new, but which in reality are as good as new. Chances are that he will sell them at a profit, thanks to his low overhead and sharp salesmanship.

Some franchise dealers sell mostly to independents at wholesale, relying entirely on big volume at a very small

markup.

 Batches—The main point of friction between franchise dealers and independents lies in the wholesaling of used



## you stop ... safely

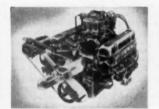
You're rolling along at 50 or 60 miles an hour. You slam on your brakes. You stop-safely and surely. One reason why is that the manufacturer of your car gave you the extra protection of brake lines of Bundyweld Tubing. Doublewalled Bundyweld won't leak, won't collapse, won't give in to vibration. It works for you faithfully, as it has for millions of motorists during billions of miles of stop-go driving.



Bundyweld takes pressures of 16,000 pounds per square inch. It's over 15 times stronger than necessary to protect your life. No ruined engine for you.



You tramp on your brake pedal Your oil lines form a key part and create a pressure of about of the system that lubricates 1,000 pounds on every square inch of brake-line tubing. Your oil and you're in for trouble – and heavy repair ex-pense. But Bundyweld lines never give up. No oil-line leaks.



Underneath your car a long gasoline line runs from tank to engine. You have shorter gas lines on the engine. Bundyweld gas lines give you never-say-die performance, contribute heavily to your over-all motoring pleasure and your faith in your car.



Want power steering? right up and order it. Bundyweld safety is built into powersteering mechanisms-and brake lines, oil lines, hydraulic window-lift lines, too. This all means safer, more carefree motoring for you and your family.

### Why you're safer with Bundyweld Tubing



1 Bundyweld Tubing begins as a single strip of tough, accurately rolled, copper-coated steel.



2 We carefully roll the single strip of steel like this, make it into a long, double-walled tube.



3 We take the rolled-up tube, fire it in a furnace, where the copper bonds solidly with the steel.

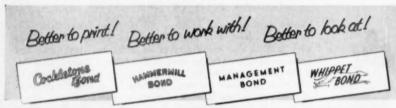


4 Result: Bundyweld Tubing; double-walled and extra-strong; copper-sealed and leakproof.

### Bundyweld Tubing

BUNDY TUBING COMPANY DETROIT 14, MICHIGAN





LUXURIOUS Cocklotons a VERSATILE Hummormill & STURDY Management & FAST-RUNNING Whipper sond is a handsome letterhead paper which, with thou-sands of users, has proved itself "more for the money. Hammermill skill has made it moderate in cost, vet it will lend prestige and dignity to your business correspondence.

Rend is now available in a brilliant bluewhite, plus twelve popular colors, with greater snap and crackle, increased bulk and strength. Consistently fine in quality, it is the paper most used in America for letterheads and

Sond, watermarked, is now available in a more pleasing white with new brightness plus higher bulk and strength. Choose it for business printing where you need a watermarked bond that will provide you with satisfaction at suprisingly low cost. Bond has a new, bluewhite appearance, plus greater opacity, and standout strength characteristics. It constantly provides trouble-free feeding on automatic equipment and assures you of good performance with an economy in cost that is unusual.

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You can obtain business printing on better-than-ever bond papers by Honoremill wherever you see this shield on a printer's wiredow. Let it be your guide to printing satisfaction.



cars. The franchise man, of course, is trying to get rid of as much junk as possible, sweetened by a minimum of clean cars. The independents are becoming increasingly choosy, which is the main reason why so many franchise dealers are opening their own used car lots. An experienced Detroit salesman figures that the franchise dealer used to wholesale a good half of their turn-ins. but this ratio is shrinking fast.

• Pricing—The pricing of used cars is a science in itself, if a highly variable one. The one firm factor in it is the general habit of dealers of fixing the sales price by adding \$200 to the price they paid. This holds good regardless of the size or quality of the car; the same \$200 will be added to a \$500 buy or a

\$1,500 buy.

The franchise dealer watches the used car auction prices carefully. In fixing the amount of a turn-in allowance, he generally subtracts the \$200 from the price paid for the same model at the most recent auction.

· Prices-All sorts of factors affect prices. For instance, some Hydra-Matic equipped models may become scarce as a result of the Detroit Transmission Division fire. If they do, their prices will pop up fast. Prolonged strikes in a given area can knock the bottom out of the market; so can droughts and floods

The present slump, of course, is much larger than local, and the trade sees no real solution except buckling down to hard selling. A good many dealers think it would help, though, if the manufacturers would slow down production below the 6.5-million units a year rate at which they ran for firsthalf 1953. It's not that new car production in itself hurts the independents. On the contrary, they had a banner year in 1950, when a record 8-million cars and trucks were produced. But many dealers think that the new car market is gradually becoming glutted, while prices stay too high-and too far away from used car prices. Others see the other side. They say that, when new car prices go down, used car prices always drop, too.

· Financing-Another trouble frequently blamed is the difficulty of getting sales financed. There's often too wide a spread between sales prices and the various trade listings of values, on which the finance companies base the size of their loans. That means the buyer has to produce more cash.

Used cars and new cars don't necessarily thrive or starve together; each has its own group of regular customers. However, weakness in the industry as a whole generally shows first in used cars. And this can react on new cars by swamping the franchise dealers under excess turn-ins, thus crippling their new car activities.

## Transportation News

Volume I

## P-I-E EXPANDS SERVICE TO MEET SHIPPER'S NEEDS

### **Expansion Is System Wide**

Pacific Intermountain Express Co., transcontinental motor freight carrier, has expanded and augmented its pickup and delivery, over-the-road, and terminal facilities in a move to provide increased service for shippers and receivers of motor freight.

Although all terminals and sales offices are included in the over-all program, the most outstanding improvements are as follows:

Los Angeles, Calif.-P·I·E has expanded its pickup and delivery fleet serving greater Los Angeles to a total of 90 units. The area served now includes the San Fernando Valley, all harbor ports and the greater eastern Los Angeles area, including Riverside and San Bernardino.

A new expedited service providing next morning delivery in Las Vegas and second morning delivery in Salt Lake City has been started at the Los Angeles terminal to provide faster service for receivers in these two areas.

Kansas City, Mo.-P.I.E's new 48door terminal, completed the first of the year, is now providing expedited service for shippers and receivers in the greater Kansas City area.

Oakland, Calif. - 75 flatracks are now rolling on the firm's western division to increase P·I·E's capacity for handling heavy shipments that must be crane or side loaded.

New terminals have been constructed or leased in Pocatello, Colorado Springs, Provo and Las Vegas. In addition to these terminal facilities P.I.E



P-I-E's expansion program is the recent acquisition of 5.43 acres for the enlargement of P-I-E's Oakland Terminal.

#### Reefer Research Continues

Denver, Colorado.-With the object of expanding its refrigeration service and furnishing shippers of perishable commodities with the latest improvements, P·I·E is continuing its refrigeration research and equipment testing program.

Thirty-two reefers are now in service handling frozen foods, meat, poultry products and other commodities requiring controlled temperatures between -5°F. and 45°F.

now has sales offices located in Indianapolis, Cincinnati, Cleveland, Milwaukee, New York City, Philadelphia and Washington, D. C.

### Import Traffic Representative Appointed at Chicago

Chicago, Ill.-Midwestern importers utilizing the P·I·E ship-to-shore-todoor service for trans-Pacific imports can now call upon an import traffic specialist for assistance. The special representative will serve importers throughout the area receiving shipments via California ports.

### Thru-Trailer Service Expanded

Scheduled thru-trailer services are now in operation between the Pacific Coast areas of San Francisco-Oakland and Los Angeles as far east as New York, plus a similar service into and out of Cleveland and Indianapolis.



CHICAGO, ILLINOIS DENVER, COLORADO ELY. NEVADA

OAKLAND, CALIF.

PACIFIC INTERMOUNTAIN EXPRESS

TERMINAL & SALES OFFICES

OAKLAND, CALIFORNIA (GENERAL OFFICES)
OGDEN, UTAH
PICCHE, NEVADA
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RERO, NEVADA
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SALES OFFICES

PHILADELPHIA

WORCESTER









IRON ORE SHIPS on Great Lakes are bigger but maneuvering space at Great Northern loading docks is not; that's one reason why this year's story is one of . . .

## More Ore, More Slowups

Iron ore shipments on the Great Lakes are piling up to a new high this year. With the end of the eight-month season now in sight, the pace is so far ahead of last year that shipowners and railroad dock men both confidently expect the volume to crash through the 100-million-ton mark.

This smash-hit volume has put a heavy strain on shipping facilities from the Lake Superior district to the downlake ports, despite the postwar growth in carrying capacity and recent improvements in handling facilities. It has magnified and thrown the spotlight on bottlenecks at head-of-the-lake loading docks. It has doubled the decibels in the complaints of shipowners and operators that delays there cost them unnecessary loss of time—and money.

There's general agreement that there is some delay in loading vessels at the head-of-the-lake docks, but when you come to the reasons it's a question of whose decibels are louder. Officials of the ore-hauling railroads owning the docks say one big reason is the bunching up of ships—and oftener than not that's due to fog delays. Whether any major bottleneck-breaking projects are called for—well, that depends on your view of the future of lake ore shipments.

• Peak-The rail men, as a matter of fact, say they think the docks have

done pretty well in handling this year's peak tonnage (though the shipowners put in that that's small consolation for time and money lost in idled ships).

Up to Sept. 1, about 65.8-million gross tons of ore had been delivered on the lakes this year (1.88% of it going to Canadian ports). That's 28-million tons more than for the same period last year (when the steel strike held things back)—and it's close to last year's total of 74.9-million tons for the entire April to mid-November season.

• Capacity—The year's peak shipments have been made possible by the postwar growth of carrying capacity. There are more vessels in the iron ore fleet today than ever before—and many of them are bigger ships, and faster.

Since the war 20 new ships of U.S. registry have been placed in the iron ore carrying trade on the lakes, adding 349,500 tons per trip to the carrying capacity. All in all, there are 272 ships in the iron ore fleet, with a total capacity of 1,908,100 tons per trip.

• Complaining—That increase in capacity is one reason for the rise in the shipowners' decibel output. They say they've invested up to \$5-million tor each new ship to boost carrying capacity—and then run up against bottle-necks at the loading docks. The loudest complaints appear to concern the docks at Superior Wis. But to under-

stand that a brief rundown of main loading ports is necessary.

• Ports—Between them the head-ofthe-lake docks of the Great Northern Ry. and the Duluth, Missabe & Iron Range Ry. (wholly owned subsidiary of U.S. Steel Corp.) accounted for more than 75% of last year's iron ore tonnage shipped over the lakes.

The five DM&IR docks are at Duluth and Two Harbors, Minn. The ore the railroad hauls out, mostly from the Mesabi range, goes into ships of the Pittsburgh Steamship Division of U.S. Steel. The Great Northern's four docks at Superior, Wis., however, are visited by more vessels of more ore-carrying ship companies than any other port.

The Northern Pacific Ry. and the Soo Line (Minneapolis, St. Paul & Sault Ste. Marie RR) jointly operate a dock at Superior, and the Soo also has docks at Ashland, Wis. The Chicago & North Western Ry. has docks at Ashland and at Escanaba, Mich. · Bill of Particulars-By a rough estimate, Great Northern's Superior docks will have handled this year, by the time the season ends, 2,900 cargoes averaging 12,000 tons apiece. The number of companies using the docks might in itself tend to multiply the squawks (DM&IR shipments are all ir the family, so to speak). Consensus seems to be that while delays occur at Duluth, loading at Superior does take longer, for a variety of reasons.

Here's the gist of one lake shipping company's complaint. In 1950 its ships averaged eight hours and 49 minutes at the Superior docks. That takes in the actual loading time, the time unavoidably lost as a result of weather conditions, frozen or wet ore, etc., but the company claims that two hours of idle time could have been saved.

This year the same company figures 4.5 hours of idle time per trip which it insists could be eliminated. For all ship owners and operators that totals up to 13,050 lost hours-544 lost days-at a cost of \$1,000 per day per ship, or \$544,000 for the year for all companies. According to the company, \$300,000 of this was added this year. · Reasons-Although no new docks have been built at the head of the lakes for many years, there seems to be gencral agreement that the trouble does not come from lack of dock space. (Parenthetically, unused loading capacity is reported at the Northern Pacific's Superior dock, and at Ashland and Escanaba.)

Ship and railroad men agree that one big problem is the sorting and grading of ores, which requires major switching operations in the rail yards behind the Great Northern docks. From 35 to 40 grades of ore pass over these docks, coming from seven large and small ore producing companies;



## "Wotta waste of time. Cyclone Fence don't need any signs!"

• Any efficiency expert would back up this burglar's statement. For Cyclone Fence, itself, tells everybody

that private property must be respected.

Besides barring the way to thieves, vandals and trespassers, Cyclone Chain Link Fence gives plant management complete control over employees and visitors. They have to use designated entrances and exits. Cyclone Fence is taut and trim when new... and it stays that way through the years.

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a copy.

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WAUKEGAN, ILLINOIS - SALES OFFICES COAST-TO-COAST - UNITED STATES STEEL EXPORT COMPANY, NEW YORK

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Our informative booklet is filled with photographs, drawings and graphic descriptions of different styles of fence and gates for the protection of property. Whether you're interested in a few feet of fence or miles of it, you'll find this booklet worth your while. Send for your copy, It's free.



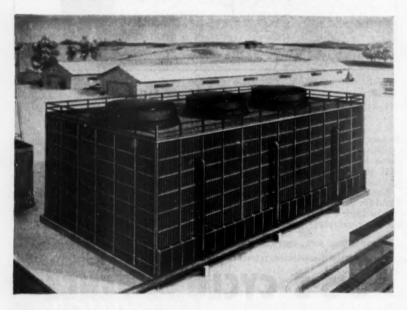
UNITED STATES STEEL

### INDUSTRY NEWS IN BRIEF

## SANTA FE'S NEW "MD-54" COOLING TOWER CUTS INITIAL COSTS, INCREASES PERFORMANCE

Los Angeles . . . Cooling tower design has undergone a number of significant improvements. After holding faithfully to the basic pattern, the Santa Fe Tank & Tower Company, Los Angeles, has taken an aggressive step toward developing a cooling tower with a substantially improved construction design. The newly designed tower is said to

the "MD-54" two separate and distinct standard types of wetted surfaces. After a series of extensive tests, it was found that one surface is best suited to lowest first cost, and the other surface to the lowest evaluated cost on an amortized basis. This makes the "MD-54" the most adaptable to meet the requirements of each individual plant.



require fewer parts for construction, which in turn, allows for faster erection and less maintenance.

Santa Fe engineers branded their new tower the "MD-54" which is the result of a series of laboratory and field tests that measured all performance factors in relation to its new structural features. Simplified construction and better utilization of materials in the "MD-54" is the key to the new design and improved performance.

According to Santa Fe, the basic design of the "MD-54" cooling tower allows for the largest possible range of size variations.

A new bracing system designed for minimum obstruction to the free flow of air results in better cooling performance. This new bracing requires only two specially designed joint connectors in conjunction with 3 standard braces to build any size or combination of sizes, Santa Fe engineers have designed for shapes of the "MD-54" cooling tower.

and G. N. has to keep the ore separated not only as to grade but also as to ownership.

Another difficulty the railmen mention is the lack of adequate space between some docks at Superior for maneuvering the larger ships now on the lakes—with a 70-ft. beam compared with an average of 58 ft. for the older type vessels. R. E. Kelly, assistant to the Great Northern's general manager in Duluth, points out that the Superior docks are only 200 ft. apart, says this was once adequate but now causes a maneuvering problem.

Shipping companies also gripe about what they say is faulty information from the dock men on tonnage of a load and claim this adds to loading time.

· Remedies-Rail men say that while there have been no new docks there's been a sharp increase in loading capacity because of improved facilities and mechanization. Kelly says Great Northern spends \$500,000 a year on maintenance—built a gantry crane and car shaker (to loosen the ore) at one Superior dock last year and plans to install another this winter-has modernized its ore steaming plant-and has dieselized its engines on the Iron Range division at a cost of about \$2,600,000. The G. N. docks handled 26-million tons in 1952, compared with 12-million

to 15-million 20 years ago. Paul H. Van Hoven, president of DM&IR, says his road modernized its No. 1 dock at Two Harbors last year at a cost of \$1,750,000, resulting in 50% reduction in loading time. Van Hoven joins Kelly of G. N. in attributing most delays to bunching of ships, says the docks can handle the ore if the ships arrive regularly.

· Future-Should the rail companies go further? Should Great Northern spend \$3-million to \$5-million to enlarge its dock rail yards, as some ship owners and operators urge? Should the roads build new dock facilities?

Both Van Hoven and Kelly reply that it would be impractical to build new docks, because of anticipated lower iron ore tonnages from the Lake Superior district within a few years.

Kelly of G. N. says: "Our thinking is that ore shipments from the Lake Superior district will be less in the fu-ture because of foreign imports. Taconite development will also have an effect. With taconite there will be less tonnage because of the high iron content, and the physical limitations in producing this product."

The ship men have another angle on the future, though. They say carrying ore before mid-April and after Nov. I is a money-losing proposition, and elimination of costly idle time would make possible a later-opening and earlier-closing shipping session, with

more profit to them.

Santa Fe Tank & Tower Co., 5401 So. Boyle Ave., Los Angeles 58, California



## WITH TIME-SAVER SERVICE



• Many less-carload shippers have found it literally "money in the bank" when they specified B&O's Time-Saver Service. This streamline service not only saves \( \frac{1}{3} \) or more shipping time but also provides B&O dependability made so famous by Sentinel Carload Service. Receivers' plans can be made with confidence—promotions accurately timed—sales scheduled with assurance. You can benefit through Time-Saver Service—and you should! Just ask our man!



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Constantly doing things - better

CONTINENTAL'S TAILOR-MADE

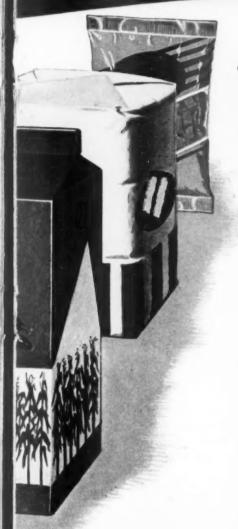
Shellmar

Betner

SERVING INDUSTRY ... SERVING AMERICA

You are always close to Continental Can with its 74 plants in the United States, Canada and Cuba, 17 field research laboratories and 66 sales offices.

## PACKAGE SERVICE NOW INCLUDES



## Flexible Packaging!

Now that the Shellmar Products and Benj. C. Betner organizations have joined the Continental family, we can offer even better service to American industry—in both the flexible and rigid packaging fields.

By this move we have created a new division of nine plants specializing in flexible packaging of every description, including bags, pouches, envelopes, wrappers and over-wrappers.

Our facilities for making rigid packaging—such as cans, paper cups, bottle caps, steel pails and fibre drums—are, of course, being expanded continually.

Today, with our various divisions, we can supply precisely the right package for everything from an ounce of potato chips or a cube of butter to 400 pounds of vitamins.

Our new flexible packaging experts work with paper, cellophane, polyethylene, Pliofilm<sup>®</sup>, wax glassine, and a variety of laminated and coated materials. In the past, with the Shellmar Products Corporation and Benj. C. Betner Co., they pioneered some of the most useful developments in the packaging field.

We welcome them to the Continental family. Their initiative, ingenuity and "do it better" spirit fit right in with our way of doing things. We believe our customers, too, will be happy that they are with us.

## CONTINENTAL

CONTINENTAL CAN BUILDING



## CAN COMPANY

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CONTINENTAL CAN COMPANY OF CANADA LIMITED, MONTREAL















STEEL PAILS AND DRUMS

CAPS AND CORK

DECOWAR

## Refor a billion aches and pains



Of all the world's versatile drugs, perhaps the most remarkable is the most familiar. You know it well. It is aspirin.

America's aches and pains are eased each year by enough aspirin to make 15 billion 5-grain tablets. And Eastman contributes to the easing of these pains. For Eastman is a major supplier of acetic anhydride, one of the primary raw materials from which aspirin is made.

This year marks the 100th anniversary of aspirin's discovery, and still no one knows how it works. But work it does. It dulls muscular pains, relieves headaches and toothaches, reduces fever, and gives relief through the course of many minor self-curing ills. It has its own warning system, for before you can take an overdose, your ears ring! And it costs next to nothing!

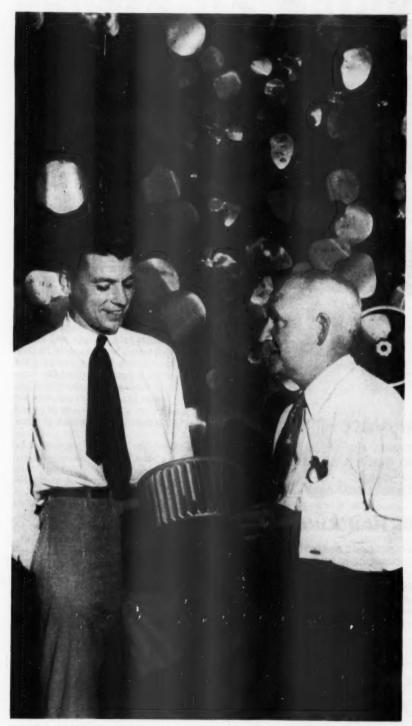
High quality acetic anhydride for aspirin is another example of vital chemicals being made economically available through Eastman know-how in chemical production. This know-how is at your service. A technical representative will be glad to call.

Eastman

CHEMICAL PRODUCTS, INC.
KINGSPORT, TENNESSEE

### COMPANIES

## Torrington: Finding a Boom in a Breeze



TAKING STOCK of the air-moving boom, president Andrew Gagarin (left) and board chairman S. W. Farnsworth have boosted production capacity of Torrington Mfg. Co.

Sales of around \$500,000 in 1945 and \$10.5-million in 1953—that's about as fast as any skyrocket goes up. And that's the story of the air impeller division of the Torrington Mfg. Co., in the Naugatuck Valley of Connecticut.

Torrington Mfg. makes the fans and blower wheels (picture) for a big share of the electric fans, room air conditioners, automobile heaters, oil burners, and warm air furnaces that are sold. It manufactures and stocks more than 325 sizes and styles, mostly made of aluminum.

To keep up with demand for air movers, the company is rushing a new wing of 46,125 sq. ft. at its main plant in Torrington. When the \$500,000 addition is completed around Jan. 1, it will add about 50% to capacity of the air impeller division. A new air impeller plant is also to be built at Oakville, Ont.

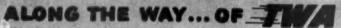
• Strange Match—Although it's not a huge company—it employs 1,200 workers at Torrington, Oakville, and Van Nuys, Calif.—Torrington Mfg. Co. is among the world's largest producers of two seemingly unrelated product lines: (1) air impellers and (2) spring coilers and rolling mill machinery for non-ferrous industries. The two divisions live under one roof at Torrington, one a mass-production operation and the other a custom-type job.

The two divisions have grown unequally, of course. But Torrington officials take equal pride in their machine division. Before the present boom in air-moving, the machine division accounted for \$2½-million of the \$3-million sales in 1945. It will still turn in about \$2½-million of the anticipated \$13-million sales for 1953. Last year, total sales were \$8-million.

• Waiting for the Bandwagon—The only link between the chief groups of Torrington Mfg. products dates far back in the history of the electric fan. Early makers of fans—manufacturers of electric motors who saw a new use for their units—picked brass as the most attractive material for the fan blades. So they came to Connecticut's "Brass Valley" for the stampings.

"We just happened to be on the corner and ready to go when the parade came by," says Samuel W. Farnsworth, chairman of Torrington's board (picture).

It was more than luck that the air impeller business grew so large. The





ONLY TWA serves all major markets in U.S.A. and 21 world trading centers oversegs.

- Provides scheduled all-cargo transatlantic round-trip service every week between N. Y. and Paris.
- Operates Speedpak service from Paris to Bombay, Colombo and intermediate points.

### 111111111 HOT off the press

NEWSPAPER AND MAGAZINE PUBLISHERS ARE BIG USERS OF TWA AIR CARGO FACILITIES. IT'S FAST. IT'S EASY. IT'S ECONOMICAL. GET TWA RATES, SCHEDULES TODAY.



### PAUTIOUS HANDLING



OF 3-D SCREENS OR ANY MERCHANDISE IS ASSURED WHEN YOUR SHIPMENT GOES VIA ONE CARRIER ALL THE WAY TO 'S DESTINATION. FIXED RESPONSIBILITY IS AN IMPORTANT SAFEGUARD.



company experimented with fan blade designs and steadily broadened its line to keep up with new uses of air movers. Its research department aids the entire air-moving industry, and its sales de-partment promotes business for the whole industry, too.

As a result, employment at Torrington has soared from 388 in 1943 to

more than 1,200 today.

• Up and Coming-There's nothing of New England quaintness about this company except its history. Its offices are modern, and its promotion methods are unorthodox.

Yet the company was founded in 1885 for a purpose that has long since been lost in the shuffle: "to manufacture, sell, and deal in the article known as the 'Bishop Upholstery Nail' and all other manufactured goods, wares, and merchandise: of wood, leather, iron, brass, steel, or other materials.

That took in a lot of ground, and for many years the company's output did likewise: upholstery nails, carpet tacks, bicycle pumps and tire valves, umbrella springs, toe clips, parts for Welsbach gas burners, wire clamps for garden hose, eraser holders for pencils, pay-as-you-burn gas meters.

The manufacture of auxiliary machinery for nearby brass mills began in 1895. The company later went down other bypaths: the first master cutting machine for recording player piano music, the first auto truck used in Torrington, radio tube sockets, and others.

· Sharp Turn-The company's development took a new tack in boosting the air impeller business at about the same time as a management shift in 1945. That's when Farnsworth took over the reins, first as executive vice-president for 18 months and after that as presi-

One of the things Farnsworth did from the start was to improve relations with stockholders and with employees. The annual report issued at about the time he joined the company was an unilluminating summary of figures on a small folded "menu" card; in 1951, the company's report won an award for its format and informative quality. Meanwhile, the number of stockholders has broadened from 276 in 1946 to 726 last year.

· Young President-Farnsworth's chief pride seems to be the man he groomed to take over the presidency last Jan. 1: 38-year-old Andrew Gagarin (picture).

Gagarin came to Torrington seven years ago to take a \$50-a-week job in

production control.

"Within a year I was training him as president," says Farnsworth. "It shows the premium on intelligence that we must put on good management. When Andy came to us, he didn't know a nut from a bolt, a left-handed screwdriver from a right-handed one-now he

# NEW PLASTIC MATERIALS ADD PROPERTIES NATURE FORGOT

## Look to today's new materials for help in putting <u>new</u> properties into your product

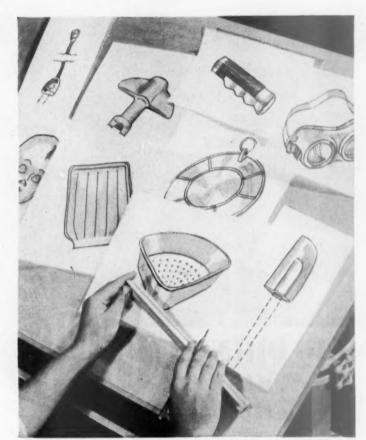
What properties would you like to add to your product? Flexibility . . . toughness . . . chemical resistance . . . smarter appearance . . . color?

For many manufacturers (and you may be one), better, faster selling, more versatile products will be a reality tomorrow...because of new, improved materials uncovered by Monsanto research today.

For example: Monsanto recently developed a new technique for molding its Opalon vinyl resin... which greatly widens the range of applications for injection molding vinyl chloride. Typical of the vast research daily devoted to plastic materials, processes and applications, this latest development in the injection molding of Opalon dry blend vinyl resin opens new design opportunities for manufacturers of electrical equipment, flexible fittings, appliances, sporting goods, housewares, toys and many industrial products.

Perhaps you, too, have a use for Opalon-or another Monsanto plastic-in your present products, or ones still on the drawing board calling for properties possible with one of the new plastics. You'll find answers to many of your questions about these new materials in Monsanto's latest report to management. Send for your *free* copy today; the coupon is for your convenience.

Opalon: Reg. U. 8. Pat. Off.



For products such as automotive and refrigeration parts, sporting goods, toys, housewares, etc., Monsanto's Opalon vinyl plastic delivers flexibility ranging from soft to semi-rigid...outstanding electrical properties... resistance to abrasion, moisture, oxidation, most acids, alkalies and common solvents... and a wide range of color.



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FREE-REPORT TO MANAGEMEN	NI
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MONSANTO CHEMICAL COMPANY, Plastics Division, Room 1230
Springfield 2, Mass.

Please send me your new management report on new materials aiding design.

Name & Title

Company

Address

### YOUR BUSINESS DEPENDS ON PUMPS



VERTICAL DEEP WELL TURBINE PUMPS FOR WATER SUPPLY



HORIZONTAL PUMPS FOR LIQUID TRANSFER AND CIRCULATION



PROCESS PUMPS FOR CHEMICALS AND HYDROCARBONS



VERTICAL CLOSE-COUPLED PUMPS FOR LIQUID TRANSFER



in charge of sales. Perhaps the most unusual feature of Torrington's institutional promotion campaign is the Gold Book the company has issued since 1950. Companies that make products using Torrington air impellers pay \$125 a page for ads in this book. The book, titled "How to Have Comfort from Moving Air." explains 25 types of air-moving units, tells how to select the best type for each purpose, gives specifications.

knows as much as any nontechnical

man, and we have good engineers for

• The Gold Book-In 1948, Torrington began pushing consumer advertising, even though it doesn't sell anything to the general public. "The idea was-and is-that we can't sell our units until other companies sell the products that our fans go into," says Dudley B. Robinson, vice-president

the technical problems."

Last year, 50,000 copies of this book were circulated. One-third of them went to buyers of Better Homes & Gardens' Five-Star Home plans; others went to architects, builders, department stores, electrical wholesalers, furniture and hardware stores, plumbing contractors, public utilities, and editors.

Torrington also follows up with identification tags that its customers can attach to the finished appliances they make. These tags are plugged in the company's consumer advertising.

### A BIG DRINK of Water in Reserve

### HOW THE CITY OF NEW YORK PREPARED TO **ROUT A DROUGHT WITH PEERLESS PUMPS**

Six of the world's largest vertical turbine pumps stand guard against drought, on the banks of the Hudson River, ready to sup-ply the city of New York (60 miles away) with a supplemental 100 million gallons of water per day. After the drought in 1949, the Board of Water Supply was determined that the city of New York would never again face such a shortage. They brought a major part of the problem to the capable

hands of Peerless engineers. Peerless' answer was the development of six 2500 hp pumps, each with a capacity of 20 million gallons per day against a 600 foot lift,pumps, which in tests, exceeded their required overall efficiency by 8 to 12%. Industry and agri-culture, as well as municipalities look to Peerless for leadership in the field of liquid transfer. Peerless engineering service is available nearby; let us serve you.

### PEERLESS PUMP DIVISION

FOOD MACHINERY AND CHEMICAL CORPORATION

Manufacturing Plants: Indianapolis, Ind.; Los Angeles, Calif.; Fresno, Calif. Offices: New York; Indianapolis; Chicago; St. Louis; Atlanta; Dallas, Plainview, Lubbock, Texas; Phoenix; Fresno: Tulsa; Albuquerque; Los Angeles. Distributors in principal cities. Consult your Telephone Directory.

### **COMPANIES BRIEFS**

Earthmover merger of Allis-Chalmers Mfg. Co. of Milwaukee and Buda Co. of Harvey, Ill. (BW-Aug.15'53,p56) was approved by Buda stockholders last week. But the adverse vote was large enough to threaten trouble if formal objections are filed.

John Deere & Co., farm equipment manufacturer, will close its Yakima (Wash.) plant next spring. Work has been partially transferred already to Dubuque, Iowa. Sales volume at Yakima has reportedly dropped since the plant there was acquired six years ago.

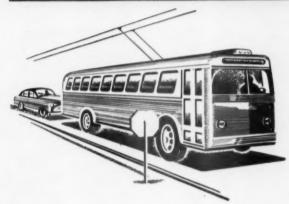
National Container Corp. offered to buy stock of Monroe Paper Products Co. of Monroe, Ohio, provided it can acquire 55.6% of shares by Sept. 21. The offered price is \$10 a share.

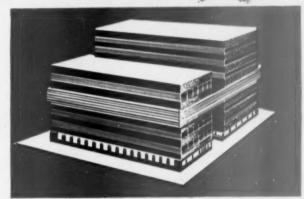
Hallmark Cards, Inc., began construction of a new \$7-million plant in Kansas City. Design of the 756,000sq. ft. building is unusual: Each of the seven floors will have more area than the one below, and each will have a street-level entrance. Explanation: The structure will be built against a rocky slope that carries the streets.

# There's no substitute for "ALL STEEL" safety









# ... especially in Wiring Systems-!

You prove the fact that there's nothing quite as good as all steel safety... by the car you drive, the bus or train you ride, the building or factory you work in. Steel's safety factor works for you in the very same manner when it comes to electrical wiring systems. Whether it's buried cable or surface wiring, steel clad systems constantly protect vital power carriers. Steel conduit, busways, surface raceways and underfloor ducts provide economies to you as a businessman—extreme flexibility, constant electrical efficiency, minimum maintenance. To be positively sure of "all steel" safety, insist on National Electric Products for all of your electrical system plans.

FOR ALL STEEL ELECTRICAL SAFETY, REMEMBER THESE NAMES:



SHERARDUCT rigid steel conduit



NEPCODUCT steel underfloor raceway



A.B.C. armored bushed cable



"PLUG-IN" STRIP multi-outlet wiring system



METAL MOLDING surface raceway

These are typical of the many NE steel-clad wiring systems.

EVERYTHING IN WIRING POINTS TO

#### **National Electric Products**

PITTSBURGH. PA.

3 Plants • 7 Warehouses • 34 Sales Offices

#### HABITS



MUSIC IN THE AIR is a way of life at Music Inn, a specialized resort hotel on a 300-acre estate near Lenox, Mass. The inn was started four years ago by Philip and Stephanie Barber, a New York couple who wanted to live in the country and gather congenial people around them. First they found the place. Then, because it was so close to the Tanglewood Music Festival, they decided to focus on music—all kinds. This year, Music Inn has been doing 20% more business than last year. Rated at 100-guest capacity, the place often managed to put up 110 music hobbyists for a night.



TASTES DIFFER but Music Inn guests are all dedicated to making music, whatever out



SPECTATOR ROLE isn't popular at Music Inn. When a professional folk singer (right

# Music Inn:







GONE GAL: Anita Schneer, Columbia University student, arrived at the inn, parked her



let an individual may choose. At left is a mouth organ; next, a recorder (p. 120).



foreground) comes to entertain, everyone is soon joining in with him.



JAM SESSION at piano features Dr. Edmond Souchon, New Orleans surgeon, on guitar and Robert Greene, TV writer, and another guest on the keyboard. It may last an hour.

# They Come to Play (Story continues on page 110)







bags in the office, and hurried to the lawn with her guitar (left and above). It was late evening before she finally went to her room.

#### THE THRILL A MAN DESERVES



# A WEEKEND IN

How long has it been? How long since you wandered through the towering trees, filled your lungs with fresh forest air, startled to the snapping of twigs afoot . . . and stalked game? Try it again this weekend! Take a Winchester Model 61 with you; when you spot your game, he's yours. This great, pump action 22 rifle comes up as fast as pointing your finger-and fires with extreme speed and accuracy. Whatever your game, you'll shoot better . . .

WINCHESTER

#### MODEL 61

- Winchester Proof (chromemolybdenum) Steel barrel and action.
- · Smooth slide action.
- Cross action safety trigger lock.
- Handles Short, Long and Long Rifle cartridges interchangeably.

\$55.15 Price subject to change

ANOTHER Olin PRODUCT

ARMS AND AMMUNITION DIVISION OF OLIN INDUSTRIES, INC., NEW HAVEN 4, CONN.



RHYTHM SECTION beats it out on tuned drums made from steel oil barrels.



GUEST FINDS OUTLET for his musical instincts in a paper-covered comb.



FIRESIDE CIRCLE listens to Arabian folk songs sung by composer-conductor Leonard Bernstein, background. At his feet is his wife, TV actress Felicia Montealgre.

## Every Man for Himself in

Music Inn is thriving because it caters to people who want to make music, not just listen to it. There's a growing number of such people, and businesses are profiting from the trend.

Makers and distributors of musical instruments are having a banner year. Americans have often been criticized as button-pushers and dial-twisters, interested in music only as a spectator sport. Yet the music stores are selling more instruments than ever before. At least they think so—there aren't any reliable figures for early years, and today's sales statistics are little more than an educated guess.

The gold brushes off, too, on music teachers, music schools, publishers of band music and standard works that an amateur can play. Notably out in the cold, though, is the popular sheet music business. That trade speaks of a dwindling sales volume to be split among far more publishers than before the war.

• New Golden Age?—One golden age

New Golden Age?—One golden age
of music in the home ended with the
radio. The player went into total
eclipse. Families ceased to gather
round the piano to sing "heart songs;"
people gave up their flutes and violins
and—to a lesser extent—pianos in favor
of getting music by radio.

Then a countertide set in. Radio stimulated new interest in music of all kinds. Technique of reproducing music was improved, and the phonograph came back, stronger than ever.

Now the music reeducation of



SOULFUL HUMMING satisfies this girl in another informal group at piano.



PROFESSIONALS take over in one non-participation program: Trinidad Night.



JAZZ FAN records jam session on tape. Seven others were doing likewise that night.



4 A. M. and the piano and drums are finally allowed to cool off. It's . . .

## **Upsurge of Music-Making**

(Story starts on page 108)

America is going into a third stage. After 25 or 30 years of passive interest, people again want to play instruments. Music in the home may be entering a new golden age.

#### I. Best Sellers

The character of the music boom shows clearly in the kind of instrument that's selling best. Big increases are in the things you can play by yourself in the home: pianos, accordions, guitars, ukuleles, and recorders (page 120). Of these, the most sensational gain is in the recorder—the woodwind instrument, not the reproducing machine.

Violins and cellos, brass instruments, and the more complex woodwinds are

selling well, too. But not so much for home consumption as to stock the increasing number of school bands and community and industrial orchestras.

• Total Sales—Best available figures on national sales are calculated by the National Assn. of Music Merchants in Chicago. They are based on excise tax returns, crosschecked by reports from association members.

According to the trade group, \$81-million worth of American-made instruments were sold in 1939, about \$90-million in 1941. Last year's sales ran to \$305-million. Sales in the first six months of 1953 were 8% to 10% ahead of last year, and the industry counts on about \$325-million by year-end. Of course, inflation accounts for



#### . . . a small-package gas-fired Unit Heater with lusty lungs

Only 23" high-yet it has a capacity of 50,000 Btu's per hour.

Compactness is its special asset. It provides directional space heating (with space saving) facilities for thousands of low-ceiling stores, garages, service stations, diners, vestibules, entrances, etc.

Simplicity is the key to its compactness. Gas is fired directly in the tubes of the leakproof one-piece heat exchanger, resulting in maximum heat transfer. It gauge ALUMINIZED STEEL is used for this rugged heat exchanger. This exclusive Carrier feature adds years of service. Gas and fan shutoffs are completely automatic.

Carrier Gas-fired Unit Heater 46750 is typically Carrier engineered, handsomely styled, exceptionally quiet in operation and sturdily constructed. AGA-approved for all types of gas,

#### . WANT MORE INFORMATION?

Call the Carrier representative in your Classified Telephone Directory, or write to Carrier Corporation, Syracuse, New York.



Carrier Gas-fired Unit Heaters come in both propeller and duct types, in 8 sizes with capacities from 50,000 to 230,000 Btu's.





AIR CONDITIONING REFRIGERATION - INDUSTRIAL HEATING



with a low-cost *mergency* Electric P

When storms interrupt electric power, even the finest homes are unlivable. If you live in an outlying residential area your problem is particularly acute. Without electricity you have no heat, water, refrigeration or lights. Radio, food freezer, sump pump and other electrical equipment cannot operate.

You can avoid losses from freezeups, food spoilage and other dangers by installing an Onan Emergency Electric Plant in your garage or basement. Very little space is required. Installation is simple and inexpensive. When power outages occur, the Onan Electric Plant supplies regular 115volt A.C. electricity for as long as the emergency exists. Automatic controls start the plant when power is interrupted and stop it when power is restored to protect your home even when you're away!

Onan Emergency Electric Plants are built in capacities to fit the needs of any home . . . 1,000 to 35,000 watts. Write for folder and guide to help you determine size of plant necessary.

#### PROVIDES ELECTRIC POWER FOR THESE ESSENTIAL USES ...



1. Automatic oil, gas, and coal furnaces. 2. Electric water system (If you have your own 3. Home freezer and refrigerator. 4. Lights, radio, etc. 5. Electric range (Limited use) 6. Water

FIND OUT HOW LITTLE IT COSTS. WRITE TODAY! D. W. ONAN & SONS INC.



\$32 8 University Avenue S. E.

Minneapolis 14, Minnesota

some part of the dollar gain since 1941.

Unit sales are figured at about 1.2million instruments last year and about 1.3-million this year. This doesn't count imported instruments, which run into big figures, especially in accordions and woodwinds. European reed instruments benefit by a comparatively low duty of 15%; brasses are also imported heavily, though the duty is higher than on woodwinds.

· Front Runners-You can see the strength of the music boom in this fact: Every leading instrument is selling as fast as it can be made. Sales are limited only by production capacity, trade peo-

ple say.

That's true of guitars, for example. Before the war, about 180,000 guitars were sold in a good year. Last year 300,000 were sold. This year's total will be slightly higher, thanks to stepped-up production. "But we could sell a lot more if the manufacturers could make them," said a dealer. It's also true of pianos and accor-

#### II. The Durable Piano

No other instrument has had more ups and downs than the piano. It has always been expensive, quickly responsive to economic conditions and to fashions. In the '30s, the piano nearly went the way of the dodo; today it's bouncing to new heights. The second-hand market, however, is slow.

In the current year, there'll be far more pianos sold than back in the early 20s, the former peak of piano popularity. That's if you don't count the nowextinct player pianos, which accounted for much more than half the 350,000 sales 30 years ago. This year's sales will hit between 180,000 and 200,000

pianos.

· Ceiling Unlimited-"We could sell two or three times as many pianos and electronic organs as we're getting," says Harold S. Morse, general manager of Baldwin Piano Co.'s New York office. "The only limiting factor on our sales volume is production.'

Morse, who is also a director of Baldwin, says the company's volume is running ahead of last year, when gross sales exceeded \$21.6-million. That fig-ure compares with \$17.2-million sales in 1951 and only \$11.8-million in 1947.

Baldwin claims to have the highest sales of any piano maker in the world. Its 1953 output of pianos will be around 30,000. If Baldwin could get the skilled labor to increase its force of 3,000 employees, it could make and sell many more pianos, Morse says. But its Cincinnati plants are in a tight labor

Materials shortages have plagued Baldwin-and other musical instrument makers-for most of the time since Pearl



#### What's new in rocket engines?

Only in form are today's rocket engines "new." The idea existed as early as the 13th Century, when Chinese archers lashed arrows to tubes of gunpowder.

This modern form of an old idea has been made possible by the alloy steels and other special metals made with Vancoram ferro alloys. For these are the only metals that can withstand the corrosive inferno of a rocket engine's insides.

So it has been throughout industry. Turning age-old dreams into reality, alloy steels have opened the way to aircraft that probe the stratosphere . . . high-speed trains that link all corners of the nation . . . tools, machines

and structures that set new records in every field of human endeavor.

For the finest of alloy steels today—and finer ones tomorrow—Vanadium Corporation's mines and mills produce ferro alloys of vanadium, chromium, silicon and titanium. Other Vancoram products include master aluminum alloys and uranium for atomic energy.



Outer space becomes a new frontier, thanks to modern rockets with engine parts of apecial stainless, heat-resistant steels. Many of these steels are made with Vancoram Low-Carbon Ferrochromium produced by a unique special process at VCA's new Graham, W. Va., plant.



"Making hole" through solid rock calls for oil-well drilling bits of tough, wear-resistant alloy steel. Engineered with Vancoram ferro alloys to meet virtually any specifications, alloy steels are the basic high-performance materials not only in petroleum production but in almost every industry.



New research center now nearing completion at Cambridge, Ohio, is the latest step in Vanadium Corporation's long-range program of planned expansion. Activities at the new center will cover all phases of metallurgical research on ferro alloys and master aluminum alloys.

# VANADIUM CORPORATION OF AMERICA

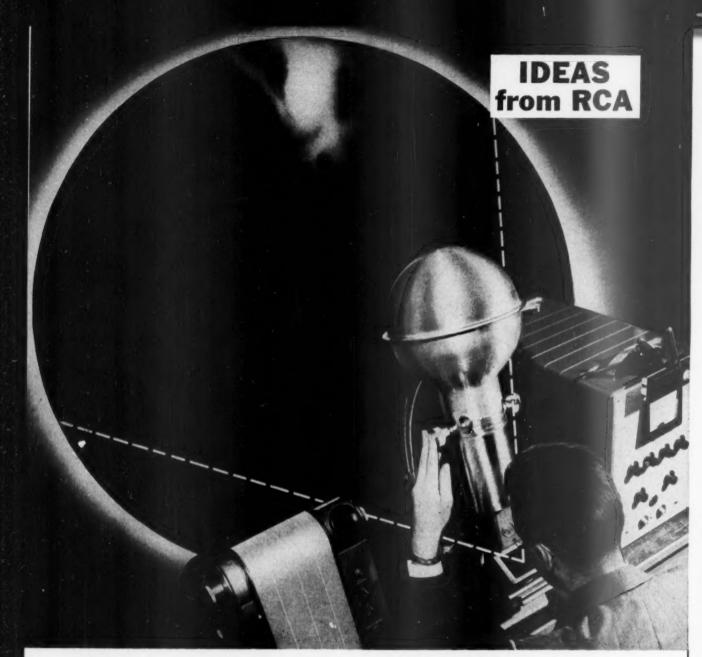
420 Lexington Avenue, New York 17, N. Y Detroit • Chicago • Phtsburgh • Cleveland

PLANTS—Niagara Falls, N.Y.; Graham, W. Ve.; Cambridge, Ohio; Duranga and Naturita, Colo.; White Canyon, Utah

MINES-South America, Southern Rhadesia, Canaca, U.S.A.



Producers of alloys, metals and chemicals



# How good does your molecule look today?

If Quality Control is important to your operation, you should know what your product's fine structure looks like beyond the range of the light microscope.

Why? Because you may be wasting hours of precious laboratory and field-test time, gathering facts that you might obtain in minutes.

How? Simply by identifying the structure of a satisfactory run of your product—and comparing all others to it—with RCA's high-speed, low-cost Electron Microscope (Model EMT-3).

At a pilot plant of Socony-Vacuum Oil Company, for example, the RCA Electron Microscope helps cut weeks of test time to just a few minutes. A quick electron microscope picture of a grease sample now does a large part of the job that formerly required days of testing in a machine.

This instant check means big savings to Socony-Vacuum, because it maintains almost constant watch over production runs. All this provides a better product at lower cost to Socony-Vacuum customers.

For product improvement, for substantial savings, you may find the answer by looking at your product's structure with an RCA Electron Microscope.

Your present laboratory personnel can easily learn to use the RCA Electron Microscope under the guidance of RCA technicians. Your present laboratory procedure can easily absorb the introduction of this remarkable new instrument.

Obtain information on the RCA Electron Microscope by writing RCA Engineering Products, Dept. 26UC, Building 15-1, Camden, New Jersey.



#### MAKE YOUR MOVIES MORE EFFECTIVE . . .

by adding your own sound track with the RCA 16mm magnetic recorder-projector. By speaking into the microphone as you watch your film you can have a new sound track ready for instant use. Have low-cost magnetic stripe added to your films, and you can make all your films do extra duty—make training films double as sales films, bring old films up to date, add sound to silent films.



#### WORD TRAVELS FAST . . .

at Davis Construction Corp., Hicksville, L. I., because RCA 2-Way Radio maintains constant contact between headquarters and all sites. Routine instructions, emergency calls, requests for equipment—all go through without delay, without unnecessary travel—thanks to this low-cost, easy-to-use equipment. For fast plant-area communication—for wide-area coverage in authorized industries—look into RCA 2-Way Radio.



#### SPEED UP INTEROFFICE COMMUNICATION ...

A second phone on your desk makes sense when it's fast, low-cost RCA Modernphone. With Modernphone, you just push a button to reach your party—talk without broadcasting your message—carry on internal business without tying up your outside phone. In just ten minutes an RCA Distributor can let you check Modernphone's speed right at your own desk. Write today for a free demonstration. No obligation on your part, of course.



#### MEMORY EXPERT ATTENDS ALL MEETINGS . . .

Conference notes and call reports take on new meaning when they're made by the new RCA Push-Button Tape Recorder. This new recorder hears every word—can't make an error—puts as much as two hours of recording on a single tape. Use it at all meetings to present a running report to absent members—to maintain accurate report files. Use it for training, for presentations, for easier speech-making. Buy the RCA Push-Button Tape Recorder at your RCA Dealer's.

#### SEND FOR THESE INFORMATIVE BOOKLETS

Write: RCA Engineering Products, Dept. 26UC, Building 15-1, Camden, N. J.

- ☐ RCA Electron Microscope (Model EMT-3)
- ☐ RCA Magnetic Recorder-Projector
- RCA 2-Way Radio
- ☐ RCA Modernphone
- RCA Push-Button Tape Recorder
- RCA Industrial TV

- □ RCA Microwave
- RCA Metal Detector
- RCA Sound
- □ RCA Broadcast Equipment
- □ RCA Audio-Visual Products
- □ RCA Scientific Instruments



RADIO CORPORATION of AMERICA

ENGINEERING PRODUCTS DEPARTMENT

CAMDEN. N.J.

# ...and what does this company have for employees in the way of Group Insurance?



# A complete plan of group benefits worked out with NEW YORK LIFE!

#### P.S. HE TOOK THE JOB

Every day, more and more employers find that the feeling of security Group Insurance gives employees proves to be mighty good business. To the employee and his dependents it means freedom from financial distress caused by sickness, accident or death. For the employer, it serves as an economical means of maintaining good employee relations helps reduce absenteeism and turnover—attracts new employees.

New York Life, with a complete line of Group Insurance coverages including Group Annuities, can help you work out a plan that meets your company's needs. Ask your New York Life agent or your broker for full information today.

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A MUTUAL COMPANY FOUNDED IN 1845

Write for free booklet, "Trends in Group Coverages" by Wendell Milliman—one of a series of lectures before the School of Business Administration, University of Connecticut. It gives latest developments in group insurance.

Harbor, but these have all been cleared

• Electronics—Two or three years before the Great Depression, radio began cutting into the home music market. In 1927, sales of the industry had dropped from 350,000 pianos—including players—to 212,000. And through the trough of the depression, only 27,000 pianos were sold in a year.

Mortality among manufacturers was high in that era. From more than 200, the number of piano builders slid to about 20 in 1937. This total has stayed about the same, even in better times. One of the oldest, Steinway & Sons, will celebrate its 100th birthday next month.

Piano makers now regard radio as a good friend. It increased the public's desire for music. And television has given the piano business an even more dramatic boost: It shows people playing instruments with apparent ease and pleasure, and it has brought families back to their living rooms. Entertainment is more home-centered, and people are likelier to add pianos to their furniture.

• Modern Design—Popularity of pianos has also been restored by redesigning them to fit the average apartment or small home. According to Morse, 80% of Baldwin sales are in the Acrosonic spinet style.

Spinets are handsomer than the old uprights, and to families that like to be free to move from city to city, they look more portable. They also fit under the high row windows that are popular in new ranch-house developments.

Baldwin has just introduced its Orgasonic, an electric organ small enough to fit into a living room. It costs \$1,495—nearly twice as much as a spinet piano—but Baldwin hasn't yet been able to keep enough in stock to supply all its dealers.

Electric organs in spinet sizes have been selling well ever since the war. Hammond claims the sales lead in this field, with Wurlitzer and Baldwin next in line.

#### III. Promoting a Boom

Many of the forces behind the rise of the piano industry apply to musical instruments as a whole. Here are some others that are cited by the National Assn. of Music Manufacturers:

- The great increase in teaching of music in schools. The American Music Conference estimate that 7-million children are learning to play instruments, both in and out of school. The total was about 2½-million learners in 1947.
- Growing popularity of school bands. Before the war, there were 28,000 high school bands, very few grade school bands. Now there are



For instance — Crucible special magnetic alloys are used in instruments sensitive enough to pick up a fly's footstep; Crucible precision castings for jet engine parts are accurate within thousandths of an inch, and Crucible clock spring steels are specially made for split-second operation.

The range of Crucible special purpose steels is daily increasing to meet industry's everdemanding needs. If you have a requirement that a special steel can fill...call on Crucible.

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first name in special purpose steels

53 years of Fine steelmaking

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MIDLAND WORKS, MIDLAND, PA. . SPAULDING WORKS, HARRISON, N. J. . PARK WORKS, PITTSBURGH, PA. . SPRING WORKS, PITTSBURGH, PA. SANDERSON-HALCOMB WORKS, SYRACUSE, N. Y. . TRENT TUBE COMPANY, EAST TROY, WISCONSIN . NATIONAL DRAWN WORKS, EAST LIVERPOOL, OHIO

# YOU CAN LOSE THOUSANDS OF \$ \$ and not even know it ...



# OBSOLETE BOILERS

Take a minute, Mr. Executive, to think about your steam plant. Surveys indicate that the chances are 2 to 1 that it is both obsolete and inefficient... and you are paying the penalty of high steam costs. Unless you know the present cost of steam in your operation, it is more than probable that you are losing thousands of dollars annually.

#### WHAT TO DO ABOUT IT

Recognize this fact...it costs more to run a boiler than to buy one... and in many cases where Superior Steam Generators replace obsolete boilers, steam costs have been reduced to the extent that the

Superior units paid for themselves in 2 to 3 years in operating savings alone.

Write for complete details in Catalog 506-F along with a case history of Superior results.

Why not talk to a Superior engineer and find out what Superior Steam Generators can do for you.



Superior Steam Generators are completely integrated steam plants including boiler, burner, and all essential controls. Capacities to 600 h.p. for pressures to 250 p. s. i. or for hot water.

for performance you can BANK on

SUPERIOR COMBUSTION INDUSTRIES INC. TIMES TOWER, TIMES SQUARE, NEW YORK 36, N.Y.



38,000 bands in high schools and 4,000 bands in grade schools. In contrast, school orchestras have declined somewhat—"the band uniform gets 'em," says one music merchant.

• Increased population, especially

in the school ages.

• High incomes and greater leisure

time (page 144).

 The increasing number of community and industrial orchestras. Many companies are promoting industrial orchestras as a means of boosting morale and reducing labor turnover.

• On the Band Wagon—Makers of band instruments are pressed to keep pace with the demand from school bands and local orchestras. They sell more of the solo instruments, of course—the trumpets, trombones, saxophones, and clarinets that individuals buy and keep for their own use. But sales of the "background" instruments—the horns, bass clarinets, and bassoons that are usually bought by the institutions—are also rising steadily.

• By Godfrey-Value of TV in promoting musical instrument sales was vividly demonstrated three years ago. Arthur Godfrey began popularizing the ukulele on his TV show, and sales went crazy.

From 50,000 or 60,000 a year before the war, ukulele sales (not counted in the NAMM figures, incidentally) soared to 2½-million in 1950. The industry is still selling 1-million a year.

#### IV. Minority Report

Not everyone in the music trade is

Some dealers deplore the low-quality instruments and the novelty stuff that are coming on the market. They fear it might drive recent converts to music back to their phonographs.

Other dealers worry about the details of the rental systems that are becoming a popular way to equip children for school bands and orchestras without too much cash outlay.

• Bottom of Totem Pole—Most unhappy, though, are the publishers of popular sheet music. The boom isn't carrying over to them, they say.

"Music is still a luxury," says one publisher, "and people can stop spending money for sheet music if they're hard up. Lots of our customers seem to be hard up now,"

Popular music arrangements have been simplified so even the beginner can play them, the publisher adds. The upsurge of the "country" type of music shows the trend toward simpler tunes.

Yet total sales are shrinking, and there are 400 large and small publishers now, compared with 50 or 60 before 1959. So the paradox is that some publishers face bankruptcy at the time when the instrument makers and dealers are beaming from ear to ear.

Trend to Suburban Offices continues . . .



Work Areas are More Attractive and Efficient



WHEN The Powers Regulator Company moved into its modern new suburban office and factory in Skokie, Ill., management specified desks that would harmonize with the attractive, functional lines of the new building . . . and still provide the same work-ease comfort and "liveable" characteristics of the attractive suburban setting. The choice was the Steel Age "3000" Line—the quality steel desks that promote better office practices and better office living in companies everywhere in America. These same considerations are important in your office, too. For fine Steel Age Desks provide a maximum return on every dollar you invest in office furniture. Every year of their long service, they pay a rich dividend in happier, more efficient employees. Why not call your Steel Age Dealer today, while this important matter is on your mind?



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WILLIAM KOCH (right) savors the tone quality of a bass recorder he has made. His son tries a soprano recorder. In foreground are alto and tenor models.



COCOBOLO wood from tropical America is favored material. It resists moisture.



RUBE GOLDBERG machine shapes a fipple, inset in mouth end of recorder.

# Recorders:



CHANGE OF SHIFT creates no confusion. Father and son are entire labor force.



LATHE shapes the barrel of the instrument as Koch keeps close watch. Machinery helps only in the rougher work; delicate processes are all done by hand.



BOOKKEEPING is kept to a minimum in the Koch shop, but Koch keeps notes on the things that interest him. Here he jots down details of a slight model change.

# A Two-Man Industry

(Story continues on page 122)



INDEPENDENT BOSS can quit two hours early if he likes and go fishing on the Connecticut River. He also likes to hunt-except for the shooting, which he omits.

# save steps



#### Don't Walk ... Teletalk!

- Save yourself tiring and timewasting trips between offices and departments to give or get information. Install Teletalk and hold two-way conversation with any other executive or department without anyone leaving his desk.
- Teletalk has outstanding fidelity and clarity of voice transmission. Installation is easy; maintenance is negligible; Teletalk can pay for itself out of time-and-energy savings!

#### a Complete Line

● Teletalk is available in many models—some with electric clocks. All are of highest quality. All give trouble-free performance. Let your dealer suggest an installation tailored to your needs... Write for illustrated booklet, "Costs Drop."

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BUSINESS WEEK . Sept. 19, 1953



# With "Control" ONE good towel gets a chance!

In spite of what you read and hear, high quality towels are often wasted just like cheap towels because users snatch two or three from a cabinet without giving one good towel a chance to prove that it can completely dry the hands.

'But Mosinee Controlled Cabinets, which dispense just one pure sulphate Mosinee towel at a time, give the user a chance to dry his hands on the *first* towel. He seldom needs a second. That is why Mosinee Controlled towel services are showing from 25% to 50% cuts in towel costs. You can prove this by a trial in your own washrooms.

#### MOSINEE

means better towel service at less cost.

Send for Mosinee Sample Towels and data on Controlled Cabinets





POPULARIZER of the recorder, Harold Newman, demonstrates for a young prospect.

#### Recorder Comes to the Front

(Story starts on page 120)

If you asked a music dealer 15 years ago for a recorder, he would likely shake his head in bewilderment. As late as 1941, there weren't 1,000 recorders in the whole U. S., and only one or two teachers of the instrument in New York. Today the recorder is a phenomenon of the boom in instruments (page 108).

The recorder is a simple woodwind instrument that comes in soprano, alto, tenor, and bass (pictures). For small cost (about \$21 for a good soprano recorder) and with little technical training, a player can make "real" music. It also has the charm of fitting into family or neighborhood ensembles with a minimum of pain to the ear.

a minimum of pain to the ear.

• Booster-Harold Newman (above) was a leader in promoting the recorder in New York, through his Hargail Music Press. Charms of the instrument were sung mostly by word of mouth, from music teacher to music teacher and from them to pupils. New York now has more than 50 teachers of the recorder, and more than 100,000 instruments are in use in the country.

"We could sell 100,000 a year in the U.S., and that would only be a beginning to meet the demand," says Newman.

• Producer—Domestic production is sharply limited, and we're importing about 25,000 recorders a year. Best-known of the domestic makers is William F. Koch of Haverhill Corners, N. H. (pictures, pages 120 and 121). In his two-man shop, Koch can produce about 1,000 recorders a year. He turned out 797 last year, but he has

installed a few time-saving steps since then.

Entire output of the Koch shop is taken by G. Schirmer, Inc., New York music store. Schirmer also sells imported makes. Recorders are Schirmer's best-selling line.

"You can buy a Koch soprano recorder for \$21 and make satisfying music," a Schirmer executive points out. "To get comparable quality in a ukulele, you'd have to pay \$47.50; in a guitar, \$500; or in an electric guitar, \$700. And you can even get a plastic recorder for three bucks. Of course, you can also pay up to \$110 for a bass recorder."

• Precision Job—Koch was a cabinet maker in the antique business before he started making recorders. The depression was killing his trade about the time Leslie Dewing, a New York music teacher, brought him an imported recorder and asked him to try to make one. It took him 20 tries to solve the basic design. Then he built 12 recorders, which Dewing sold for him. He made his tie-up with Schirmer in 1946 as his production increased.

What restricts Koch's output is the amount of hand work that's needed for the precision work. One-third of the time spent in making a recorder is hand work, though Koch and his son, William F., Jr., have devised some specialized machines.

Koch ships his output to Schirmer cnce a month, does practically no bookkeeping, and declines to expand by hiring workers. "It's nice just as it is," he says. "If I can make a good living, that's all I want."



It's not the heat-it's the humidity

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- process difficulties
- deterioration in storage

Use Alcoa Activated\* Alumina for:

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It has been outstanding in these uses for more than 20 years!

There's a grade and type of Activated Alumina for your application too. Call your nearest Alcoa sales office today, or write: Aluminum Company of America, Chemicals Division, 700-j Alcoa Building, Pittsburgh 19, Pennsylvania.





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#### Personal Security . . . and The National City Bank of New York

This growing problem must be solved on a businesslike basis

Tax collectors and biochemists are helping to make personal security—for executives as well as all other employees—one of the most pressing problems facing business management today.

Every year miracle drugs and other advances in medical science increase the number of men and women who may look forward to living beyond sixty. At the same time, world leadership in an atomic age has imposed a tax burden that makes it almost impossible for many people to pro-

vide for their old age without some form of outside help.

More and more, that outside help is being supplied by business and industry. Properly planned, efficiently administered and soundly financed pension programs are assuring a dignified, secure old age for thousands and thousands of hard-working men and women.

program for your organization may be far less than you expect. Many plans are available, including pension, profit-sharing, thrift-and-savings. Proper selection of one or a combination of these plans can provide a sound, adequate and economical retirement

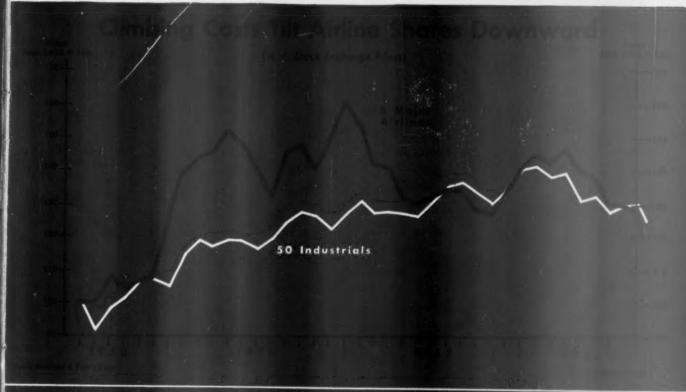
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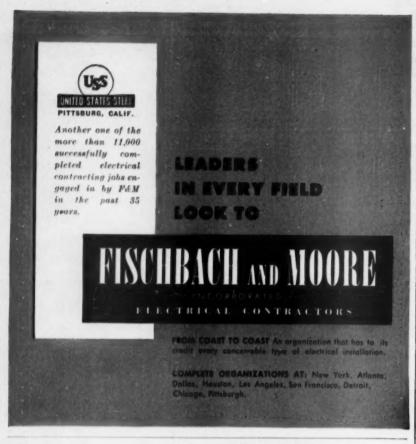
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## Six-Month Profits Rise But Investors Remain Wary

The nation's air lines have been running into the strong head winds of rising costs. Prices of everything the lines need have been moving inexorably upward. And you just can't get along



For precise checking of temperature, humidity . .



EVERY PLANT NEEDS

#### BENDIX-FRIEZ HYGRO-THERMOGRAPH



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without modern planes, pilots, maintenance crews, gasoline, and airport facilities.

On top of that, other factors have been affecting profit showings: competition, growth of lower-fare "aircoach" business at the expense of some regularfare flights, high taxes, the weather, and the public's traveling habits.

As a result, airline issues have become among the most sensitive of the speculative shares. They have climbed faster than the industrials at times (see chart), and have fallen more abruptly in the recent generally weak markets.

• Wide Prospects—When World War II ended, air transport shares were considered among the most promising of the growth stocks.

Now-eight years later—the horizons are still unlimited, but the general feeling among Wall Streeters is that as investments the lines have not lived up to their advance billing.

• Constant Drain—One of the biggest drains on airline pretax earnings is the continuous outlay for newer, faster, safer, more comfortable, and more efficient planes—or, put the other way round, the fierce obsolescence of a field where national survival, as well as competition, puts a high premium on innovation.

The drain never ends, for whenever one plane is purchased there is always a better one on the drawing board.

• Fast Write-offs—One reason for the bulge in expenditures for new equipment in the last year or so, of course, was the permission granted the airlines to write off their new aircraft by means of quick amortization.

However, the new planes cost more than those of a few years back. In 1947, for instance, the top ship flown by United Air Lines and American Airlines was the DC-6, which cost around \$800,000 equipped for commercial passenger use.

In 1951, the top ship made by Douglas Aircraft Co. was the DC-6B. For this plane the airlines paid around \$1.1-million.

Today, United and American currently are placing in service the newest Douglas ship—the DC-7—which costs \$1.7-million.

Take another case: Consolidated Vultee's two-engine Convairs, which cost \$750,000. United and other lines have bought Convairs to replace the old DC-3s, which for so many years were the work horses of American commercial aviation. The DC-3s used to cost \$100,000 or less.

• Plus and Minus—On the other hand, the new and larger planes in operation today are the direct result of competition between lines and the growing demand for air travel. Larger planes are more expensive to operate individually, but they carry more passengers and thus have a lower cost per passenger. Offsetting the benefits of the new equipment is a long list of other costs

that are rising:

Labor. Wages and salaries paid out by some major airlines last year topped 1951 by 30%. About half of the air revenue dollar now goes to employees in wages, salaries, and other benefits. A veteran pilot earns between \$15,000 and \$16,000 a year.

Gasoline and oil. Fuel for planes is the second-biggest item of airline cost. It takes around 12é-13é of every revenue dollar. The price of gasoline has gone up frequently since the end of World War II, and there is no sub-

stitute for gasoline.

Airport rentals are around double those of VJ Day.

· Aircoach-The rapid growth of reduced fare aircoach flights has helped widen the gap between income and outgo, according to some officials. A standard coach flight carries only one stewardess and serves no meals (although \$1.25 box dinners can now be purchased at some airports and taken aboard). The plane is the same type used in regular service and gets there just as fast. Yet the regular coast-tocoast air fare is around \$160, compared with about \$100 for a coach flight.

The coach business originally was confined to flights during off-hours, usually after midnight when equipment otherwise would be idle or in use on flights with few passengers. Now, due to increasing competition, its flights are on schedules paralleling the preferred-

hour flights of regular fare planes.

• Stock Prices-After the start of the Korean war in June, 1950, the air transport shares at first outpaced the industrials. Standard & Poor's index of airline shares moved sharply upward, and by the end of 1951 was 61.4% above mid-1950. Then the index turned downward.

The decline, which began in January, 1952, should remind investors that air stocks, unlike railroad issues, react to

news of bad accidents.

The downturn in part reflected a new upward spurt in operating costs. But a more important factor was its investor reaction to three bad crashes, the third of which resulted in the closing of Newark Airport for some months.

S&P's index of 50 industrials, on the other hand, moved gradually higher until at the height of the Eisenhower election market last January it stood 45% above the pre-Korean level. Since then the industrials have declined, but more slowly than the air lines.

• Peak in 1945-The present low estate of the airlines index, incidentally, is much more extreme than the chart shows. Late in 1945, when it was at its postwar high, the index was more than 158% above its level at the



# ..and some of the big red ones

As a child, Mrs. America was tempted by the most colorful and exciting article in the candy showcase. Time hasn't changed this basic sales appeal. Today, a trim, colorful package has the same compelling effect. It catches her eye - arouses desire, induces sales.

To get the utmost appeal for their packages, sales-minded executives look to Package Machinery Company . . . They realize that "Package", with 40 years of experience, has the know-how to help create "Packages that Sell". They are impressed, too, by the many new developments that have been pioneered by our designers and engineers - and the wide variety of machines we have available to meet modern packaging requirements.

Why not put this unparalleled experience to work for your company? We'll be glad to study your package and production methods and give you the benefit of our recommendations.

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Your inventory—
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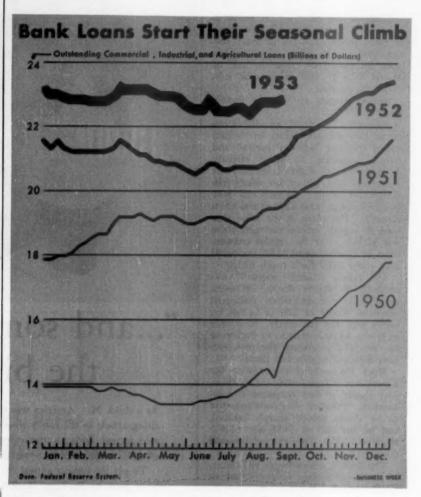
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cutback of hostilities in Korea.

Nevertheless, in the past six months some of the lines appear to have turned the corner, and are reporting a larger percentage of gross carried down into pre-tax earnings. As the compilation shows, American Airlines, Eastern, Pan American and Trans World are carrying down better percentages than a

year ago. United, in the midst of purchase of new DC-7s, expects to improve its showing in the second half enough to bring both pre-tax and net earnings up into the neighborhood of those for 1952.

Still a long, hard battle with costs may still be ahead for the air lines. That's what investors seem to think.



#### Bank Loans Start Climbing

With the normally heaviest season just arriving, they are already phenomenally high. If demand brings money tightness, Federal Reserve may come to the rescue.

Bank loans to business and agriculture are on the rise again (chart, above). In itself, that's not startling; it follows strictly the normal seasonal pattern. What makes it news now is that bank loans are already higher than they

tern. What makes it news now is that bank loans are already higher than they have ever been before at the outset of the season of heaviest borrowing. And more banks than ever before in the postwar years are already approaching the "loaned up" point.

As a result, the whole banking business will feel the strain if this year's seasonal uptrend is anywhere nearly as strong as the surges of the past three years. There isn't enough slack in the present credit situation to take care of the extra demand. Member banks have borrowed \$900-million from the Federal Reserve to meet the off-season demands of the past few months.

· Role of Fed-The banks hope that,



# with foolproof EDISON batteries

Long, trouble-free battery life, without babying, is a matter of record at the eastern plant of a large stove manufacturer. Truck-operation reports show no failure attributable to the Edison batteries that power them.

A 24-hour accidental overcharge—obviously contrary to recommended practice—did not harm one of the batteries. After being watered to the proper level, it was in perfect condition, ready to go to work. Regular maintenance in this plant is simple—consists merely of proper watering, charging, occasional cleaning.

Fast boost-charges provide additional power. When temporary increase in plant production required maximum truck operations during two shifts, boost-charges during lunch hour pro-

Most Dependable Power-

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vided the extra power needed until more batteries could be put in service.

For all 'round service—foolproof operation, dependable power, longer life, lower maintenance cost, less downtime—you can't beat an Edison. Made of steel, it out-works, out-lasts other types of batteries. You can get the same kind of service on your job, by calling your Edison field engineer. He'll gladly give you complete information. Or send for Bulletins S.B. 2039 and S.B. 3808. Edison Storage Battery Division of Thomas A. Edison Incorporated, West Orange, N.J.





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# 170,000 POUND LIFT



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That's 85 tons at one crack, as this giant power transformer was set in place. The City of Los Angeles, Department of Water and Power, own the two 45-ton Lorain Moto-Cranes, Model MC-824, shown handling this job. Experience over the years with smaller Lorains on rubber proved that, with their speed and mobility, Moto-Cranes could "go places - fast", to handle installation and maintenance over the vast, sprawling area of their power domain extending up to 300 miles from the city. That's why they bought two of the "world's largest cranes on rubber" - to solve their bigger and bigger lifting problems. For instance, one of these Moto-Cranes travelled 1,100 miles the first year to 43 different locations. Some of the jobs took a fraction of a day - some took months. No other crane with this lifting capacity has the mobility to do this!

If you have a material handling problem - large or small, where mobility will reduce your costs - solve it with a Lorain on rubber. Capacities up to 45 tons.



if necessary, the Federal Reserve will step in with enough aid to prevent any substantial rise in interest rates or tightening of terms. They remember that the last time the money market became alarmingly tight, the Fed lowered reserve requirements (BW-Jun. 27'53,p34).

This time, the Fed might make another cut in requirements. Or it might take the less dramatic method of increasing to substantial proportions the open market purchases of governments that it has been making at intervals since late last spring (BW-Jul.4'53,p116). Either step would ease the strain on the banks and simplify life for the Treasury, which faces some heavy borrowing to finance the federal

• The Burnt Children-However, the experts don't all agree as to just what the upsurge in commercial loans means. Many are sticking out their necks as little as possible-which is understandable, since they have been burnt before, especially of late.

For example, a number of them predicted early in the year that loan demand in the first quarter was likely to drop off-quite sharply. Later on (BW-Apr.4'53,p104), a number predicted that:

· Second-quarter loan demand was apt to decline steeply.

• The normal fall pick-up in demand would appear later than usual in the third quarter.

Neither prophecy, of course, has come true.

Of those experts who are willing to talk freely, some think that the coming expansion of bank loans has a good chance of smashing even the massive upsurges of the past few years. They think that the loan volume of weekly reporting members may go up as much as \$2.8-billion, compared with \$2.5-billion last year, and over \$2.2billion in 1951.

However, there is an opposite school of thought which holds that the raise will range somewhere between considerably less and somewhat less than that.

· Variables-When the passage of time reveals which is right, the winner will owe much of his success to sheer luck. Mere smartness isn't enough with all these variable factors:

· To what extent will high spending for new plant and equipment continue (BW-Sep.12'53,p30)? Although much of this is handled by long-term financing, a good deal gets at least its initial start from bank loans.

· How much longer will business allow inventories to pile up? Big inventories require plenty of temporary bank financing, even when, as now, much of it is probably defense goods.

· How long will general business activity maintain its present high level. It takes plenty of money these days to make the corporate mare go. That has been accounting for a large part of the recent bank borrowing, especially for the growing amount of buying on time.

• If EPT Dies—As one aspect of the future, most bank loan experts agreed: They see the possibility of a decided drop in demand after the yearend, provided the excess profits tax dies on schedule.

No matter how a corporation figures its EPT liability—on an average earnings or on an invested capital base—it is allowed an extra credit for any increases in its borrowed capital, including bank loans. Many bankers think that this has touched off a large amount of borrowing, perhaps as much as \$1.5-billion or even \$2-billion. They think that with EPT out of the way this type of loan will be paid off as quickly as possible.

#### Competition Tightens in Northwest Insurance

The long-smouldering scrap between agent-manned and direct-mail automobile insurance companies has broken out into the open in the Pacific Northwest

General Insurance Co., Seattle, is stepping out to meet the competition of the direct-writing companies, like Allstate Insurance Co. (Sears, Roebuck subsidiary), which sells auto policies at rates 20%-25% below those charged by the standard agent-represented carriers.

A new concern, Selective Auto and Fire Insurance Co. of America, is being added to the General group to handle the new lower-cost policy.

Selective Auto's rates will be around 12% below those now being charged by General and other standard companies, and within a 5% to 10% range "above or below" the premiums charged by the direct-writing companies.

General says Selective Auto's new lower rates will be achieved by (1) a streamlining of policy-writing procedure to cut sales costs, (2) a reduction in agent's commissions made possible because the new policy-writing procedure cuts agency office detail, and (3) a new simplified renewal procedure that eliminates much paper work. In addition, the new company hopes eventually to reduce home office clerical costs by mechanical labor savers, including, perhaps, electronic bookkeeping.

A big factor, however, will be the careful selection of risk that has been traditional in the General group of companies.



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Of course, we could take it to Taft-Peirce. They have more than 450,000 square feet of manufacturing space, completely equipped to handle every phase of this job.

They could work from our blueprints, tool up the job, and turn out parts so you'd never know the difference.

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#### FINANCE BRIEFS

Treasury success: 96.5% of the \$8-billion 10-year 2s maturing last Tuesday (BW-Sep.5'53,p112) were exchanged for the new issues offered in the Treasury's latest refunding. That's one of the highest exchange ratios on record; officials say they generally have to pay off 10% to 12% on a maturing issue. There were over \$4.7-billion subscriptions to the new one-year 2½% certificates, and about \$2-billion to the 2½% five-year notes.

Class I railroads earned about \$72-million in July, according to the American Assn. of Railroads. That tops July, 1952—when the steel strike played hob with freight traffic—by 82%. The net for January-July was \$490-million, topping 1952 by \$142-million, or 40%.

Virginia Electric & Power Co. will soon offer publicly 558,946 shares of new common, worth \$14-million at current market levels. VEPCO says expansion in the next five years will cost between \$175-million and \$200-million. The company figures it needs to raise about \$100-million by the end of 1957.

Cleveland bank merger died aborning. The discussions that were expected to bring consolidation of the Central National and the Union Bank of Commerce ended last week. Local reports indicate that Central National's directors initiated the breach.

A midyear order backlog of nearly \$1.7-billion is reported by Lockheed Aircraft Corp. Commercial airline orders account for only 8.7% of it.

Dissenter: Unlike most electric utilities, California Electric Power Co. doesn't expect 1953 earnings to run well ahead of 1952. President Albert Cage estimated last week that earnings would be about 80¢ per share of common stock, down from last year's 89¢. He blames poor water conditions at the company's main hydroelectric plants.

A finance company merger is in the cards with Walter E. Heller & Co. arranging to acquire National Discount Corp., of South Bend, and operate it as a division. Stockholders of both companies are to vote next month on the deal, which would be handled by an exchange of stock.

St. Regis Paper Co. has gone into the plastics business, buying practically all outstanding stock of Cambridge Molded Plastics of Cambridge, Ohio. CMP's chief markets are the refrigerator, home appliance, and automotive industries.

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#### NEW SEA POWER -

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In her boiler rooms, too, the Mitscher is outstanding. For she is the first U.S. ship "of the line" to use boilers of the controlled circulation type. These controlled circulation boilers — pioneered in America by Combustion — mean more room below deck for men and equipment and have many other advantages on combatant ships.

The leadership that introduced this major development is yours, too, in Combustion boilers of every type and capacity — for large power plants or small industrial installations.

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# MARKETING









BEHIND THE SCENES, designers ready Neiman-Marcus' annual . . .



FASHION EXPOSITION: It took place last week in Dallas, the store's home. N-M's reputation in fashion circles is such that visitors came from all over the U.S.



FIRST NIGHT of the show catered to upper crust, once served by Neiman's exclusively. The . . .



SECOND NIGHT aimed at the store's other market, people with less expensive tastes.



HIGH PRICES -up to \$2,500-prevail in Neiman-Marcus' second-floor Woman's Shop, while . . .



LOW PRICES -from \$30-are the word in the fourth floor. N-M has built reputation as . . .

# A Store that Serves Two Markets

(Story continues on page 136)



# HOW TO MAKE YOUR NAME Stick

It's a mystery to most people... a problem to manufacturers. And the most practical solution from any point of view is the new DOT Fishtail fastener. Specially designed for nameplates and other die-cast trim, it has teeth that actually bite into the nameplate's chromefinished studs. Quickly assembled with a simple hand tool, it holds and retains sealing compounds, works equally well on flat or contoured surfaces. Spring tension ensures positive locking yet allows adjustment for oversize holes.

Fishtail fasteners are available in several sizes and types. These and thousands of other specialized fasteners and aliied devices, designed by United-Carr, help speed assembly, cut costs, improve product performance for manufacturers of appliances . . . automobiles, electronic apparatus, aircraft, furniture. If you need special fasteners in volume, check first with United - Carr — FIRST IN FASTENERS.

#### UNITED - CARR United-Carr Fastener Corp., Cambridge 42, Mass.





ROAMER Stanley Marcus, head of Neiman-Marcus, spends much of his time wandering around the store.



FURRIER He once ran Neiman-Marcus' fur department. As with his other jobs, he still hasn't given the job up entirely.

#### Neiman-Marcus and Boss:

Despite its comparatively short history, the U.S. isn't without its folklore. In Las Vegas they talk about a man who lost \$100,000 on the turn of a card. In New York they tell how you can walk from one end of the city to another, underground. In Illinois they recall the afternoon Red Grange ran through a bewildered Michigan team to score four touchdowns in 12 min.

And in Dallas, Tex., they talk about Neiman-Marcus.

They tell about a young woman who walked into the store barefoot and bought \$10,000 worth of clothes—including shoes. It seems oil had just been struck on her land.

They tell about the man who came into Neiman's and bought an electric comforter for his pet lion, and about another who bought a Neiman-Marcus window display and had it set up in his living room on Christmas morning, just to set off the mink coat he was giving his wife.

• Split Personality—These anecdotes and scores of others have given Neiman-Marcus a reputation for extravagance, for catering to the crazy whims of millionaire oilmen who fly around Texas in their own DC-4s.

This reputation is widely accepted. Stanley Marcus (cover), the store's president, once went to Prudential Insurance Co. for a loan. The Pru balked; told Marcus his store was too "frothy," catered too much to the big spender.

So Stanley Marcus set about convinc-



CHECKER Like an old-style merchant, he finds it hard to delegate authority. He often checks for dust.



PRESIDENT Yet when he wants to, he can be all executive. Here he heads a conference.

## Two Personalities Apiece

(Story starts on page 134)

ing the insurance people that his store has another side, too. He showed them that the bulk of Neiman-Marcus' sales are not to the upper crust. He showed them that, contrary to myth and fable, his sales pattern is much the same as that of other top-rung apparel specialty stores such as Saks Fifth Avenue and Bergdorf Goodman.

S:

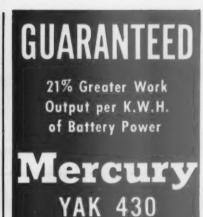
The fact is that Neiman-Marcus does sell to the upper crust—and to the icing on top of the crust. But, with less fanfare and publicity, it sells even more to a less well-to-do, family budgeted group that might be described as the upper-mass market. Saleswise, Neiman-Marcus has a well developed, well controlled split personality.

· Big Show-Last week, at Neiman's

16th annual fashion exposition, the store's schizophrenia was acting up more than ever (see pictures). On the first night it put on its most extravagant fashion show of the year. Thirty-three models pranced and posed before hundreds of elegantly dressed Texans and visitors from all over the country.

Stanley Marcus awarded Neiman's famous Fashion Oscars—this year to dress designer Charles James (picture page 134, left); shoe creator Ben Sommers; the Gilbert Orcels, Paris hat designers; and Marchesa Olga di Gresy of Gilliate, Italy, who designs and makes Mirsa sweaters. Some past award winners: Hattie Carnegie, Lilly Dache, John Frederics, and Elsa Schiaparelli.

After the show, the glittering





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audience moved on to the formal ball.

On the second night of the exposition, Neiman-Marcus made its play for its other customers, the more moderate spenders. The customers came dressed informally, though fashionably—mostly in Neiman-Marcus apparel—and the platoon of models again waltzed onto the runways. To keep the second-nighters from going away slighted, Stanley Marcus and the Oscar winners repeated the award ceremony, acceptance speeches and all.

• Two Accidents—The store developed its split personality over a period of years, partly by accident, partly by design. Founded in 1907, it spent its first 25 years selling high fashion, ready-to-wear clothes to Texas women who could afford to pay the relatively fancy prices. Oil, cotton, and cattle were putting more and more dollars into Texas pockets; and the high quality, ready-to-wear business did well—but it didn't boom. The top year of those early times was 1929, when net sales hit \$3.6-million. Then came Accident No. 1, the Depression.

During the 1930s, Neiman's made its first big change. To hold customers who had been driven to the wall in the crash, Neiman-Marcus added some lower-priced lines. At the same time, it tried hard to maintain high quality. Sales passed the \$5-million mark in

Accident No. 2 was World War II. The war brought defense plants to Dallas and nearby cities. Many of the workers' wives, and the women workers, found themselves with—to them—big money. To these women, Neiman-Marcus had always been a legend, and a gilded legend at that. Now, all at once, they had money. They wanted to dress up.

• The Change—Neiman-Marcus realized what was happening, and the big change began. It expanded into the lower brackets even further than it had during the 1930s. The first real signs of a split personality were showing themselves. Sales passed \$6-million in 1942 and soared well over \$11-million in 1944.

Defense workers weren't the only moderate income people who began to shop at Neiman's; secretaries, clerks, and school teachers started buying there, too. And after the war came the newly married, and the families of junior executives who staff the many district offices located in Dallas and its environs. Side by side with this group was another that had long shopped at Neiman's—the \$10,000-to-\$20,000-a-year families.

Few of these people are in the true class market. Not in Texas terms.

They don't dash into the store between planes and snap up a \$2,000 mink coat. They don't send their daughters off to college with a \$5,000 wardrobe.

Neiman's has 3,500 charge customers who do shop like that, who each spend over \$2,000 a year in the store. These people make up the true class market, the "froth" the man from Prudential referred to. But the sub-\$20,000 salary group, which runs all the way down to school teachers and workers' wivesmany of whom may buy only one dress a vear at Neiman's-is in a different category: the upper-mass market. Since Neiman-Marcus started going after this market in 1942, the store has increased its sales almost five times. In the fiscal year 1953, which ended last February, net sales topped \$25-million. Stanley Marcus says this makes his store the biggest specialty store of its kind, outside New York City.

· Different Breed-It wasn't easy for Neiman's to adjust itself to selling to this new market. Salespeople had been accustomed to dealing with women who thought nothing of spending \$10,000 a year on clothes and accessories. Now the same salespeople were suddenly confronted with shoppers whose homes cost

less than that.

These new customers were well versed in Neiman-Marcus mythology. They had heard of the personalized service, the careful fitting, the top quality, broad selection, and good taste that the Neiman-Marcus label stands for. They

expected the same.

Neiman's gave them the same, and more. It began opening its one sub-urban branch on Monday nights, its downtown store on Thursday nights. It started additional fashion shows, featuring less expensive merchandise. It arranged credit plans designed for lower income groups. In its fourth floor Younger Set Shop, dresses now sell for \$30 to \$125. This shop isn't only for teenagers, as its name implies, but for the entire moderate spending group. Women in this group also buy in the second-floor Woman's Shop, but they don't buy a great deal there: The general price range is \$50 to \$2,500and special items can go higher.

· Expansion-In the last three years, Neiman's has been expanding so as to accommodate its new customers better. In 1951 it opened the Preston Center branch store, located in the suburban Preston Hollow and Park Cities area. Next, it completed a new service building located halfway between the main store and the branch. This building houses the receiving, inspection, packing, and delivery departments; and has six cold storage vaults with room for

20,000 fur coats.

This month Neiman's is completing the final stage of its expansion program. Adjacent to the downtown store, it has built a narrow, six-story structure, and has added two floors to the four-story



# Want to buy a radio for a thousand dollars?

That price doesn't even include a speaker. Just a top-notch radio receiver that lists for \$975.00.

It's the Hallicrafters SX-73 all-wave receiver originally developed for the U.S. Army, and now sold mainly to people most likely to know a radio's true worth—"ham" radio operators.

It's one of the finest communication sets ever made by Hallicrafters, long famous for precision electronic equipment. Among its carefully selected components are Ward Leonard Stripohm resistors. These are the best vitreous enameled resistors money can buy, with ovalized cores and mountings that permit tight stacking. Yet their convenience and quality entail no price premium; these same Ward Leonard resistors are used in the lowest priced Hallicrafters sets, selling for one tenth the price of the SX-73.

Whether what you make sells for \$10 or \$10,000, it will certainly pay you to use the most dependable elec-

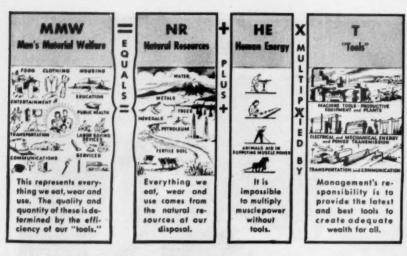
trical controls you can buy. Our engineers will be glad to help you select the proper ones for every job.



WARD LEONARD STRIPOHM RESISTORS (in circle) in underside view of Halli-crafters high precision SX-73 all-wave receiver. These wire-wound strip resistors will stand heavy overloads, are unaffected by adverse operating conditions,

Send for Ward Leonard's new 64-page catalog No. 15 which contains complete engineering data and criteria for resistor selection. Ward Leonard Electric Company, 68 South St., Mount Vernon, N. Y.





# Do Tools Perform Better for The State?

The chart above, depicting economics in its simplest terms, shows that man's material welfare is the product of three things only:

- · Natural resources.
- · Human energy.
- · Tools.

The level of material welfare of any society can be measured by the quality and quantity of each of the above three factors.

Therefore, any scheme to improve man's material welfare must deal with these three factors and can be analyzed in terms of them. But, too often, proposed changes in economic systems are not analyzed in these terms at all.

For example, the British people accepted the proposal of the British Socialists to better their welfare. This involved transfer of ownership and management of certain tools of production to the State. When they got all through, there had been no addition to the country's resources, human energy or tools. But, there had been a loss. Productivity suffered when the profit incentive was eliminated by State ownership.

What is true in England is true anywhere in the world, including the United States.

The United States, utilizing a competitive, economic system has had the incentive to create and put to use more tools per capita than any other nation in the world. As a result, America has the highest standard of living in the world.

Typical of American-developed tools that multiply man's productivity is the band machine. Originated and pioneered by The DoALL Company, these machines slice through any material, cutting continuously. No other machine tool can remove sections of material so fast. In the metalworking industry they



HUMAN ENERGY is multiplied many times by this DoALL band machine shown cutting jet engine parts.

are widely used to shape metal, replacing other tools which remove large sections slowly, a chip at a time. Time savings run as high as 200-300%. DoALL machines are sold through a nation-wide network of DoALL stores.

DOALL

WRITE FOR WALL CHART "Why Living Improves"—free of charge and without advertising matter.

THE DoALL COMPANY
254 N. Laurel Ave., Des Plaines, III.

existing building. The new main store will contain 70 departments, and employ 1,350 persons.

The expansion program has eaten into Neiman's profits, but the store expects to get back soon to its 1951 standard. That year, net sales were just under \$23-million, and net profit after taxes was \$1.4-million.

• Other Aspects—Much of this expansion—and much of the store's success—can be traced back to its split personality. But there are other unusual aspects to its make-up besides that.

For instance, it does most of its business by charge account—80% to 85%. Again, it maintains its own buying office in New York, instead of belonging to a buying group as most stores do.

And it runs some of the most remarkable newspaper advertising in the country. Very often these ads are in color. Usually, they reach for both of Neiman's markets. A few weeks ago it ran two ads, back to back, in the Dallas Morning News. One featured mink coats priced up to \$5,975. The other showed budget wool suits for \$50.

Arbiter—By working hard on two markets that way, Neiman's has done more than merely boost its sales. It has gained a reputation as one of the

country's top fashion arbiters.

Many years ago, co-founder Herbert
Marcus said: "Any store can dress a
few women beautifully. What we want
to do is to dress a whole community
that way."

When Herbert Marcus said that, he was—in effect—casting the die for the store's present dual personality. He was also citing Neiman-Marcus' prime function: The store is acknowledged to be the pacemaker in fashion for Dallas, for Texas, and for the entire Southwest. In fact, on more than one occasion, Neiman's has led the way for top New York stores. An example: Its early recognition of Dior's New Look in 1048

This association with the world's top designers, and the store's ability to be right more often than wrong when it places its bets in the fashion derby, has proved to be bread and butter to Neiman-Marcus. Many of the country's best-dressed women, by no means all of them from Texas, turn to Neiman's for the latest word on what to wear. Joan Crawford will call Stanley Marcus from Hollywood; Mary Martin will cable from London. Mrs. Eisenhower turned to the store for her Inaugural Ball gown. And what is more important to Neiman's dollarwise, the upper-mass market in the Southwest also turns to the store for guidance.

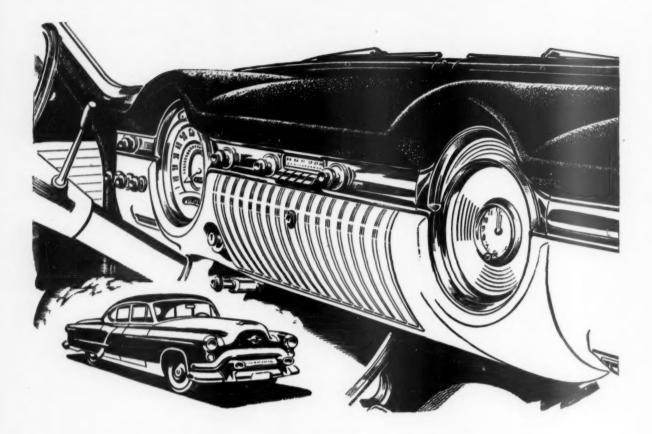
• The Right Place—In this respect, Neiman-Marcus and the Southwest work hand-in-glove. The store could never have grown to its present stature, could

ow JESSOP makes a steel sandwich to save you money!

Under a highly-prized patented process, Jessop is able to build a sandwich of fine corrosion-resistant stainless steel sections, permanently bonded to mild carbon steel slabs, so that after rolling, gleaming plates of superlative quality stainless-clad steel appear. The stainless analysis may be in accordance with any reasonable standard and the percentage thickness may be from 10 to 50 percent.

Jessop customers find great value in this "sandwich-made" steel. It has forming advantages, price advantages, and it saves vital materials. This is one of the most widely used of Jessop's specialty steel products since nearly every industry has found an application and a saving thereby. But that is not the prime point of this story. A few other companies make stainless-clad steel, but we claim they can't match us, because we want business so much we'll give better service to obtain and keep it. Send us an order and find out.

HESSIP P



# Safety first . . . beautifully featured in panel padding by Spongex

How manufacturers design safety and beauty into America's outstanding automobiles is shown by this smartly styled panel shock pad molded of Spongex cellular rubber.

Soft enough to absorb shocks, Spongex is firm enough to hold styling contours. This safety pad is 52" long and weighs 4½ pounds. It is the largest Spongex cellular rubber part, molded in

one piece, furnished to the automotive industry.

Would a resilient cellular material make your product safer to use? Give it greater durability? Often the purpose of protective cushioning is to protect the product itself from damage. For complete information on Spongex cellular materials for cushioning, sealing or flotation, write to us today.

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HOME AND OFFICE



RUG CUSHION

never have gained its widespread reputation, were it not for the legendary, oilrich spenders who first gave the store its head. At the same time, these millionaires got something from Neiman-Marcus in return. The store helped persuade them to be neat rather than gaudy. Stylewise, it helped guide them toward simplicity, kept them from going off the deep end of overdressing traditionally, a common mistake among people who get rich in a hurry.

Today, Neiman's is largely responsible for the fact that Dallas women are widely known for their good taste in clothes. And not all of these clothes come from Neiman's. Other Dallas stores have felt the competition from Neiman's and have started paying more attention to the type of sophisticated

fashion it inspires.

It's not surprising that Neiman-Marcus grew up in Texas. It would hurt a Texan's pride if he had to turn to Fifth Avenue as a style guide—hence, he's loyal to a store in his own state. And the store grows in his esteem when he sees people from the rest of the country turning to it for advice.

• Family Affair—Presiding over Neiman's is 48-year-old Stanley Marcus, eldest son of co-founder Herbert Marcus. The other founder was A. L. Neiman, Herbert's brother-in-law, who left the business when he and Herbert's sister, Carrie, were divorced in 1928. Carrie Neiman figured prominently in the store's operations until her death last spring. Herbert Marcus left three other sons besides Stanley—Edward, executive vice-president, Herbert Jr., in charge of men's apparel (which accounts for about 10% of the gross), and Lawrence, kingpin of the plush, second-floor Woman's Shop.

Stanley Marcus' personality, like his store, is a blending of two ideas. On the one hand, he is a modern businessman-intellectual: a student of typography, collector of primitive sculpture, writer of articles on fashion, sponsor of the Dallas symphony, worrier over

civil liberties.

On the other hand, Stanley Marcus is a tough-minded executive who works himself and his staff hard. Often, he'll call meetings at five o'clock in the afternoon, just when the staff is getting ready to leave.

He has never been able to give up entirely any job he has held in the store. By his own admission, he has difficulty delegating responsibility. During the day, he's all over the store, poking into everything, running his finger along a counter looking for dust.

So while he is a widely traveled, well read, softspoken intellectual, there is much of the old-style merchant in him. His shadow is cast across every department in the store. Everybody knows that Stanley Marcus is the boss.



Address

State



THE LEISURED MASSES: PART II

## Where Leisure Time-and Money-Goes

This is the second part of an article published here last week, amplifying the special report The Changed America (BW—Jun.6'53,p101), which discussed some of the broad trends in ways of living that are shaping the new U.S. economy:

The shortening of the work week not only gave Americans more time for leisure pursuits, but also changed the very nature of those pursuits. With larger blocks of time on their hands, people have new opportunities for more ambitious things than they ever did before. The long weekend, for example, was instrumental in bringing about decentralization of living, the irruption into the suburbs. This in turn helped bring on the whole do-it-yourself movement, restore the importance of the family as a unit, change dress and customs.

Along with this there has also been a major change in the way people spend their evening hours and their shorter blocks of leisure time. They have been shifting away from mass-amusements and toward individual pastimes.

#### I. Crowd Amusements

It would be foolish to say that movies, football, baseball, and other crowd







THE BIG CHANGE: To individual sports, home activity, travel instead of spectator sports.

events are on their way out. But they appear to be slipping in comparison with those things people do by them-

selves or in small groups.

In 1949 major league baseball piled up an attendance of 20-million, a gate of \$66-million. Last year those figures had declined to 15-million and \$49-million respectively, and this year-despite the vigorous shot in the arm provided by shifting the Braves from Boston to Milwaukee—there has been a further drop-off. The minor leagues are in even worse trouble, with teams and whole leagues folding up.

As for the movies, their heyday was just after the war, when they averaged a weekly attendance of 90-million for a take of \$1.5-billion annually. Now attendance is cut by half, boxoffice to

\$1.1-billion.

The fashionable thing is to blame these dreary performances on television, and from the data available there is very little doubt that TV has had a

big hand in it.

• TV's Role—The so-called Videotown surveys made annually in New Brunswick, N. J., by the Cunningham & Walsh advertising agency show the extent of TV's damage to other mass-amusements and mass-media (BW–Jul.19'53,p38). The latest survey, just completed, shows that more than 90% of all TV sets in town are turned on every weekday evening and that the average set is going for 4½ hours each night. The biggest sufferers, as might be expected, are movies and radio.

be expected, are movies and radio. It thus looks as though TV had pretty much won the battle for people's spare time in the evenings. But not entirely so. Earlier Videotown surveys showed, for instance, that newspaper reading, for instance, isn't affected by TV. And there is evidence from other sources which seems to indicate that book reading and hobbies, for example,

aren't affected either.

So evidently you can't blame everything on TV. In fact, at this stage of the game it looks as though we ought to revise our ideas about the relationship of television to other mass-amusements. What really seems to be the case is that TV dropped neatly into a situation beautifully tailored for it and that a lot of the things that helped to boom it would have affected some of the other mass-amusements in any case. Take what happened to the movies.

• Cinema's Loss—Population trends—earlier marriages, more children—removed the movies' major audience; young people. With or without TV, in an economy based on the baby-sitter fewer people can get out of the house to do anything at all, particularly if the cost of movie tickets gets piled on top of the baby-sitter's fee.

Another chunk of the audience disappeared when women went out and got jobs, virtually destroying the matinee business.

Decentralization did an even more destructive job on the movie business. Motion picture houses were largely built in the 1920s, when the trolley was still a major factor in urban transportation. Today, movie houses-like department stores-are stuck there right downtown in the middle of traffic and far away from the suburbs. No wonder the marquees have been coming down. · Drive-ins-The success of the drivein theaters in recent years is proof in itself that the movie industry has missed the boat. For the drive-ins capitalize on those same factors that have been hurting the downtown

In one swoop the drive-in disposes of the parking and baby-sitting prob-lems, and at the same time caters to the American desire for dressing informally. The basic formula that built the drive-in is now being exploited by shrewd operators who are developing a new idea in mass-recreation. Noting early in the game that from 40% to 60% of the over-all take came from food and other concessions, they began adding laundromats, amusement devices such as merry-go-rounds, and babywatching services. Today, drive-ins are turning into new kinds of amusement centers, with something for the whole family. At one Midwest drive-in you can actually go fishing.

Furthermore, in terms of seating capacity, the loss downtown has probably been made up by the new theaters, even though there are fewer units today. The magazine Boxoffice says that during the first half of 1953 no less than \$43-million was invested in 405

new drive-ins.

Will the movies stage a comeback? Right now Hollywood is optimistic, riding on a wave of better boxoffice figures for the past few months. But realistic movie people, facing the reality of television and other competition, are looking for the industry to settle down to an average attendance somewhere in the range of 47-million or 50-million a week, a bit less than the average of the 1930s.

• Participation—There is, for instance, the competition from new mass-amusements such as roller derbies and stock-car racing (page 66). On top of this, there is the resurgence of at least one much o'der form of crowd amusement, gambling (page 178). Figures, of course, are lacking in this field, but take as one evidence the proliferation of horse racing tracks, which between the last two censuses of business (1939 and 1948) jumped from 45 to 71. Or take the estimate made by Oscar Lewis in his recent book, Sagebrush Casinos, that "the amount of money wagered in all the Nevada [gambling] games

during 1951 reached a total of well over \$1½-billion."

Why this gambling urge? It could stem partly from the loose change that jingles in our pocket. But this is not a complete explanation, because the masses in poor countries gamble. There is a theory that there is some correlation between low incomes and the desperate desire to break out of the strait jacket of poverty.

Escape does provide at least one possible answer—escape from the routine of mechanized society with its dull jobs and soft pillow of insurance, pensions, safety. Gambling reintroduces the sense of danger and uncertainty into life.

Escape from an industrialized world also provides some answer to why movies and mass-amusements as a whole seem to be giving way to the things that you do yourself.

#### II. The Need for Action

Whether it is because they are escaping from the dull routine of work, or because they feel a puritanical sense of guilt at doing something that isn't practical, Americans don't like to sit still. They must go, do, or make, a fact that is of enormous consequence to the country.

· Going Places-When an American has a little time on his hands, one of the first things he is apt to do is to jump into the car and go somewhere. The American Automobile Assn. has toted up the figure of \$9.2-billion as the amount auto vacationists spend annually, a sum that includes lodging, food, gasoline, amusements, and the other things they buy and do while traveling. In other words, if AAA's arithmetic is correct, this nation spends approximately 5% of its annual consumer expenditures away from home, gallivanting around the country in a car. This is a fact that should give advertisers pause when they think where and when they are going to place their

AAA's figures on travel are all impressive. Here is a sampling:

• This year some 46.5-million people will visit the national parks, an increase of 4-million over last year.

• Car travel has given rise to a motel industry comprising 45,000 motels with a 1952 gross of \$1.1-billion.

• Some 66-million people all told, in 22-million cars, take vacations yearly, covering an average of 1,200 mi. in 11 days of travel, with each person in the car (three) spending \$140.

 Year-round—There are now several major travel trends in the making that will eventually help to transform habits, change the economy.

The first is the growing tendency to spread travel over the whole year. Our longer vacations—three weeks are

# Rockwell Report



by W. F. ROCKWELL, JR.

President

Rockwell Manufacturing Company

DURING HAPPY TIMES of expanding sales, there is a tendency not to look too critically at sales expense. Only when the sales curve drops downward does the high-flying expense curve

become unpleasantly obvious. Then steps are taken to bend it down. But there has been a time lag, sometimes a considerable one, during which profits are eaten up.

We follow a method that—we've been told—is not yet widely used. We maintain a continuous study of sales cost as well as sales volume. Each month sales cost as well as sales volume figures are analysed, compared, charted. As soon as a gap appears between them—with the sales curve on the lower side—we know that sales costs, in relation to volume, must be trimmed. Of course some time lag is still inevitable, but in our case it is very slight, and the savings are considerable.

We've been maintaining this continuing sales cost-sales volume study long enough to know that it pays; perhaps the idea may be helpful to others, too.

While there is nothing new about controlling the environment for a single department or a single operation, we believe our new valve and meter plant soon to be opened in Sulphur Springs, Texas, will be one of the few completely air-conditioned manufacturing plants in the nation. Except for the offices, it is windowless, enabling us to control the light, as well as the atmosphere, in which to perform close tolerance manufacturing operations.

It must be obvious now even to the most skeptical that the mushrooming "do it yourself" boom is not a passing fad. People will continue to paint it, fix it, or make it themselves—for two good reasons. One is economic: it costs more than most people can afford to hire skilled workers to do "handy man" jobs around the house. The second is spiritual. Nothing quite equals the warm glow of satisfaction that comes when you look proudly at something you, yourself, have fixed or built. Folks are finding out it's fun to "do it yourself." Sales of our DeltaShop and other Homecraft tools are continuing at a very pleasing pace.

Our Register Division planeered toil bridge and toll road collection practices. Their Ohmer Toll Recording and Indicating Systems have been installed on many of the country's leading toll facilities. The latest models incorporate same unusual features that assure fast, accurate collections of various classes of toils with minimum hinderance to traffic while, at the same time, providing maximum control over revenue.

We've always thought of ourselves as being in the manufacturing business exclusively. So it was something of a surprise the other day to realize that as a by-product of manufacturing, we are also in the publishing business in a sizable way. With a circulation of over 40,000, Flow Line—a publication of our Meter and Valve Division for the oil, gas, chemical and industrial fields—exceeds the circulation of the outstanding trade magazine in its field. The Water Journal, published for men concerned with water supply and sewage disposal, has double the circulation of any book in its field. The Deltagram brings "how to do it" information to more than fifty thousand home workshop enthusiasts, who pay a subscription fee of one dollar a year.

One of a series of informal reports on the operations and growth of the

ROCKWELL MANUFACTURING COMPANY
PITTSBURGH 8, PA.

for its customers, suppliers, employees, stockholders, and other friends



now not uncommon—are tending to break the rigid pattern of seasonal travel. Florida has long since ceased to be the province of the rich as a winter vacation resort. And now it is getting even more business as more and more people take two weeks in the summer and saye a third week of vacation for the winter.

At the same time, Florida is becoming a summer resort, another product of our longer vacations. This summer business has significant differences from the winter business. Winter is largely an adult vacation. But in the summer, cars bulging with whole families debouch upon Florida.

• More Time—The long vacation is also beginning to transform European travel

Mass American travel is just beginning to make itself felt in Europe. In fact, it is only this year that European travel is finally going to pass its 1929 record in terms of the number of travellers (350,000).

Something new is happening. Prewar European travel was dominated by the rich, by students, and by foreignborn people returning home for a visit. But today we're finally seeing people with moderate incomes making the Grand Tour. A very good clue to what's happening can be had from a couple of planeloads full of women that Trans World Airlines flew to Europe a few weeks ago. They weren't college girls. They weren't clubwomen. They were production workers from General Electric plants in Fort Wayne, Ind. And here is the way TWA describes them:

"Their average age is 38; their average income is \$57 a week. Few of them have finished high school, none of them has ever been to Europe before. The tour will cost them anywhere from \$879 to \$1,022, depending on whether they elect to take the 15-day or the 22-day tour. Most of them -90%—have chosen the 22-day tour, even though it involves time off without pay."

• Without Pay-TWA has noted a phenomenon of our time, people's willingness and ability to take a leave of absence. A New York department store, for example, noted not long ago that around 50% of its employees asked for a week's extra vacation last year, a sure indication that people are willing to trade off money for time.

Experts think Europeans will have to adapt themselves to this new American tourist just as Sun Valley has had to accommodate itself to a new era of vacationists who spend less for food and amusements, but arrive in greater numbers.

• Doing Things—When the restless American goes out to visit nature, he doesn't just contemplate it. He likes for High Strength and

Longer Life in

Household Appliances

Specify



N-A-X HIGH-TENSILE, having 50% greater strength than mild carbon steel, permits the use of thinner sections—resulting in lighter weight of products, yet with greater resistance to denting. It is a low-alloy steel—possessing much greater resistance to corrosion than mild carbon steel, with either painted or unpainted surfaces. Combined with this characteristic, it has high fatigue and toughness values and the abrasion resistance of a medium high carbon steel—resulting in longer life of products.

N-A-X HIGH-TENSILE, with its higher physical properties, can be readily formed into the most difficult stamped shapes, and its response to welding, by any method, is excellent. Due to its inherently fine grain and higher hardness, less surface preparation is required for either painted or plated parts.

Your product can be made <u>lighter</u>, resulting in shipping economies to consumer . . . to <u>last longer</u> . . . and in some cases be manufactured more economically, when made of N-A-X HIGH-TENSILE steel.

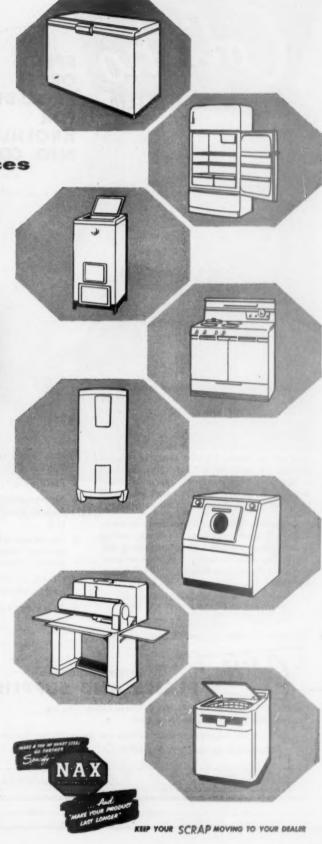
#### **GREAT LAKES STEEL CORPORATION**

N-A-X Alloy Division

France Detroit 29 Michiga

NATIONAL STEEL

CORPORATION





Orders written on a pack or roll forms. Colitho Business Systems provide for variables and blackouts, deletions Colitho plate or additions. Partial information can be added Plate mailed to factory at any time. All business paper work lends itself No transcriptions-no to simplification through a Colitho System.\*

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Copies run off for production, shipping, invoicing, accounting

copying errors at fac-

- Costly order typing pool eliminated
- Time saved-costs slashed

 Where spirit duplicating equipment is used the same results can be obtained with a Columbia Ready-Master System. Colitho Division

Regardless of the kind of business you are in,

Colitho Systems offer time and money savings

in purchasing, manufacturing, distributing, sell-

ing, billing and accounting. For more informa-

tion, mail the coupon attached to your business

letterhead.

COLUMBIA RIBBON & CARBON MFG. Co., Inc.

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Colitho Division, COLUMBIA RIBBO 509 Herb Hill Rd., Glen Cove, No.		5. Co., Inc.	
Please send information abo Our duplicating equipment		teady-Master Spirit	Business Systems.
Name			
Company			
Address			
City	Zone	Sta	ite

to do something, which has helped make hunting and fishing our two great national sports.

Fishing tops everything. It's the sport of upper-income groups, of lowerincome groups, of everybody. It's the favorite pastime of BUSINESS WEEK SUbscribers (median income \$12,395), no less than 40% of whom fish, according to a survey. At the same time, there were 17.1-million fishing licenses issued last year, a million over the year before.

Women have helped swell this total enormously, particularly since the importation of spinning from Europe. This is an easier way to get your line into water than casting. B. F. Gladding, maker of fishing tackle, says that there are now at least 2-million female fishermen-or fisherwomen-in the country and that their number has increased two and a half times since 1948.

· Big Business-Hunting is not far behind fishing with 13.9-million licenses issued last year, a gain of a million over the previous year.

Here again can be seen how deeply leisure time activities have penetrated the U.S. economy. The Arizona Fish & Game Commission recently made a survey of what hunting meant to the state. It came up with the discovery that in 1951 hunters of major game species (elk, duck, geese, etc.) spent \$6,425,839 all told in Arizona.

"Few," commented the researchers, "would expect that the sales made to hunters outrank by a million dollars all the sales of sheep and lambs in the state; by over a million all the money paid to the producers of Arizona's grapefruit and oranges; by four million all the wool sales and all the bakery products in 1951."

All active, outdoor sports have not, however, gained equally in America's rush to make use of its leisure. On one hand you have the remarkable growth in the popularity of all kinds of boating, which this year has pushed outboard motor sales to new highs. The industry reports that sales are up 50% over last year and that a total of some 500,-000 units will be sold this year.

On the other hand there is golf, which despite President Eisenhower's influence has failed to keep pace with gains in other sports. It is the nation's No. 1 field sport in terms of the value of equipment sold (\$39.5-million last vear in factory sales as against \$20.4million for baseball and softball equipment). But the game suffers from the fact that thanks to depression and housing developments there are fewer courses than there were two decades

• Making Things-When Americans have free time on their hands, they also make things.

This tendency has led to the extra-



## SYNTHANE - out of sight, but in the picture

Whenever you turn on television you are using a little-seen, but essential, material called Synthane.

Synthane is a laminated plastic of multiple virtues, which recommend it for many jobs in television.

Synthane is an excellent insulator, laminable with metal, hence, a good base for space-reducing "printed" circuits. Synthane is notable for low power factor, low moisture absorption, and ease of fabrication, three properties desirable for radio and television insulation. Synthane plays a supporting part in many behindthe-screen and behind-the-camera applications.

Synthane is also light in weight, strong, vibration absorbing, chemically resistant, high in dielectric strength, dimensionally stable, heat resistant to about 300°F.

There may be a place for Synthane in your product. To find out more about the possibilities of Synthane for your purpose, write for the complete Synthane Catalog. Synthane Corporation, 1 River Road, Oaks, Pennsylvania.

Synthane in Television . . .

A—Television comera parts

8—Television receiver printed
circuits—metal fail on Synthone

C-Channel selector switch

Synthane-one of industry's unseen essentials SYNT





Extinguishing System.

\*according to a survey by the Safe Manufacturers' National Association



The word "Kidde" and the Kidde seal are trade-marks of alter Kidde & Company, Inc. and its associated companies.



Walter Kidde & Company, Inc., 925 Main Street, Belleville 9, N. J.

Walter Kidde & Company of Canada, Ltd., Montreal, P. Q.

ordinary development of the hobby industry, which has in turn brought about the growth of an entirely new retail business, the hobby shop. The first one appeared back in the 1930s. Today, according to Richard S. Robbins, who edits the Blue Book of Hobbies, there are no less than 8,000 such outlets, either specialty outlets or departments in larger stores.

There are two factors of significance about this field for business. They could be provocative to anyone wondering where the possibilities lie in the

growing leisure economy.

For one thing, the hobby field, as Robbins points out, is a highly frenetic thing. Fads come and go-model airplanes, figurines, historical autos or trains, "numbered" painting. The rea-son for this, Robbins says, is that hobby fans are a group apart, who jump from hobby to hobby. A man can only make so many coffee tables on his power lathe, so tomorrow he makes

The second important factor is that the field is entirely dominated by small, basement operators. Big business has not yet found it worthwhile to move into the field. Eventually it probably

will.

• Culture-The American approach to culture is an active one, which suggests that the pattern of growth in the arts

is not even.

The active arts have flourished mightily. There's a boom in art sup-plies and musical instruments (page 108). The record industry shows which way the wind blows with its current retail volume of around \$200-million, a large percentage of which is now classical records (BW-Aug.8'53,p51). The "audiophile" with his hi-fi set pioneered with high-quality sound reproduction, finally forcing the big manufacturers to come through with hi-fi sets of their own.

There are a couple of major artistic fields that have lagged well behind this

general advance.

The theater-whose share of the recreation dollar has plummeted since 1929 -is one.

Reading is the other. The biggest area of hope in book publishing lies in the growth of the inexpensive, paperbound reprints, some 200-million of which will be sold this year. But pollster George Gallup took a lot of steam

out of this figure in a recent speech: "This could give us a lot of comfort if it were not for two important statistics. The first is that three-fourths of all pocket books are bought by approximately 10% of the population-72-million persons have never bought a single copy in their lives. The second statistic is that it is not the books of cultural value which account for the bulk of the 200-million sales, but the

westerns, mysteries, and raw sex sto-

· Preparation-Sports, travel, hobby, no matter what it is, the American approach to it is essentially the same. The key word is preparation. The American prepares for his safari into pleasure with as much care as a game-hunter going into Africa. This characteristic has built some remarkable industries, worth millions annually to the people in them, but it has another less encouraging aspect. It argues that perhaps the American takes his leisure very, very seriously.

#### III. Leisure Takes Practice

"I am wondering why leisure is a problem at all. Surely, nowhere else in the world do people fuss about what to do with their spare time. I think it is rather sad that some kind of guilt has been built up in this particular society so that people feel that they should be productive in their spare

These remarks were made by Santha Rama Rau at the Corning Conference held two years ago under the part sponsorship of the Corning Glass Works and devoted to the topic of Creating an Industrial Civilization. Miss Rau, author and daughter of the former Indian ambassador to the U.S., was attending a roundtable discussion on "Leisure and Human Values in Industrial Civilization.'

Miss Rau's outburst expressed the feeling many foreigners have on being confronted with the way the American prepares for his leisure and works at it

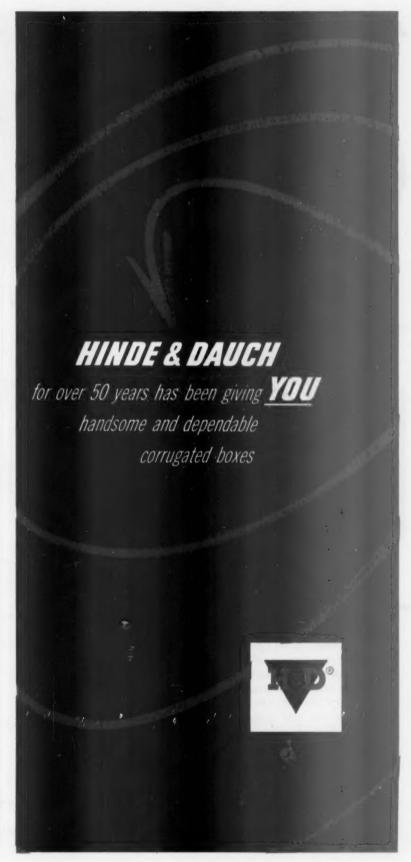
when he gets it.

• Pensioners-Is there a problem? As almost every business executive can tell you, yes, there is. It exists among the nation's growing number of retired

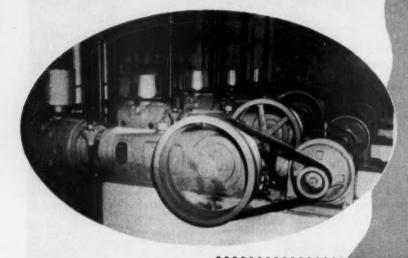
and pensioned.

These are the people who don't want their leisure. The problem is not basically economic, though many pensioners must get along on very little. It lies rather in the psychological or spiritual area. The nub is simply that the retired don't want to be retired, as the Social Security Administration found recently when it surveyed a huge sample of 18,000 retired people. A mere handful of 4% had retired of their own accord.

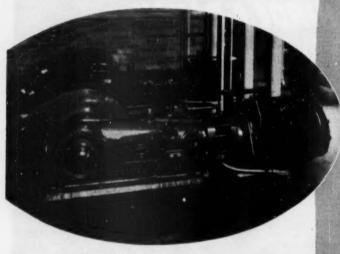
By now everyone dealing with personnel problems knows that putting someone out to pasture is a delicate business that can end with premature death. Companies and unions alike are working hard to develop programs that will help people prepare for retirement. One member of the Corning panel remarked dryly, "A conference the other day came to the conclusion that one should begin to prepare for old age in the prenatal period."
• Hobbies Not Enough—The joke had



#### It's better beer from Bogota



#### -from Kansas City



#### —and from any brewery

... when compressed air used for agitation and other brewing processes comes "pure as a summer breeze" from these Gardner-Denver Carbon Ring Compressors. They're famous throughout the world for supplying pure, oil-free, dirt-free air—are used in breweries, bottling works, food processing plants, instrumen'ation systems—wherever clean compressed air is called for. Gardner-Denver Company, Quincy, Ill.

**SINCE 1859** 

## GARDNER-DENVER

THE QUALITY LEADER IN COMPRESSORS, PUMPS AND ROCK DRILLS FOR CONSTRUCTION, MINING, PETROLEUM AND GENERAL INDUSTRY

a sharp point. Train as we will, it is doubtful that people can be made to feel that they are not being put on a shelf when they retire. Hobbies for sure won't do the trick. Louis Kuplan, executive secretary of the State of California's Interdepartmental Coordinating Committee on Aging, made this plain recently. In a speech last month at the annual meeting of the Gerontological Society he said:

"The answer does not lie in merely encouraging the older person to develop hobbies. . . While hobbies can, and do, provide satisfaction and partial fulfilment of the creative urge, and they do have a place in all lives, they are diversionary in nature—a pleasant way to use up time. But they are not an

end in themselves."

• New Attitude—This is a very nice question for the future: Can we give the retired—all those millions of them, many still in their fifties or early sixties—something more interesting to do than mounting butterflies or collecting matchbooks? It's crucial that we do so, for in the end our attitude toward retirement is only a reflection of our attitude toward leisure and its relation to work. Only when we change that will we cease "preparing" for retirement and bring it into focus as a continuing part of one's earlier life.

Achieving this involves a curious irony. It was our puritanical devotion to work for work's sake that enabled us to secure all this leisure in the first place. But now that we have it, we find that we are not always able to enjoy it because that ethic of work gets

in our way.

It is here that the true significance of our increasing leisure begins to emerge clearly. We have the goods. We have the time. But when we finally do achieve a four-day week, will life begin to bore us? Can we, in other words, build a non-work ethic that will enable us to make use of the fruits of labor?

There are signs of changing attitudes toward both leisure and retirement that look hopeful at this point—above all the shift away from passive crowd activities and toward individual active

things.

• Conspicuous Leisure—Business itself shows a tendency also to recognize leisure values, which is probably an unconscious recognition of the growing meaning of leisure in our society.

Some companies arrange business meetings in Hot Springs and other spots where people consume their leisure time in particularly conspicuous fashion. Others have gone back in a big way to a prewar method of creating incentives among distributors and dealers by taking them on luxury trips to West Indian resorts. Others have built, as National Cash Register is doing in



# Armco ALUMINIZED

# in your product - RESISTS HEAT-AND-CORROSION COMBINED

- REFLECTS HEAT
- HAS THE STRENGTH OF STEEL

Here is a special sheet metal that gives your product the advantages of two metals in one. Its name is Armco ALUMINIZED. And its record is one of excellent performance in parts of kitchen ranges and home furnaces, in automobile mufflers and many other applications. ALUMINIZED is made by bonding a coating of molten aluminum to both sides of a steel base. The steel provides strength; the aluminum coating reflects heat. Together they resist combinations of corrosion and destructive heat scaling at temperatures up to 1250 F. This aluminum-coated steel is just one of many special-purpose steels identified by the Armco triangle trademark. Thirty-eight years of national advertising make this trademark a valuable selling aid for you and for your dealers

ARMCO STEEL CORPORATION

MIDDLETOWN, OHIO . EXPORT: THE ARMCO INTERNATIONAL CORPORATION



Dayton, golf courses for the use of their

employees.

Along with this has been a slowly changing attitude on the part of many people in their thirties, forties, and fifties toward the whole idea of retirement. Here, for example, is a remark by a young professional man in his early forties:

"My father never retired, and I don't know that he ever thought much about it one way or another. Had he done so, I know he would have been very worried by the idea. But now take the next generation. Here I am, a comparatively young man, and my children are already hearing my wife and me talk at the dinner table about what we'll do when I retire. They're just bound to think differently than my father did, perhaps even differently than I do, about retirement. They're simply going to take it for granted."

· Incentives-Many businessmen will undoubtedly continue to fight vigorously against the whole idea of a society depending so largely on leisure values. Where, they will ask, is the economic goad that drives people to want more and seek more if things come so easily?

There's a question, however, whether need in its bleakest form-meaning dire necessity-is the best goad possible. That the answer may be no has been driven home by the postwar studies of consumer finances and psychology made by the Survey Research Center of the University of Michigan. Summing up its findings over the past few years, the staff recently noted:

"We find that the purchase of one commodity often leads to that of another, or to the 'felt need' for another commodity. After buying a house, one needs new furniture and household equipment more urgently than before . . there are hardly any people who

have all they want.'

It's unquestionably true, too, that hardly any people have all the leisure they want.

for instance, says he intends to propose a bill in the next Congress that will insure preservation of the commissaries. Several military groups have said that such closings will cause a serious morale problem in the services.

#### Safeway Expands

Safeway Stores joined hands with Webb & Knapp, New York real estate concern, in a big expansion program, amounting to some 100 new stores in the next 18 months-at roughly \$300,-000 per store. Webb & Knapp will buy the property, put up the buildings, and lease them to Safeway. In some cases, it may sell to a third company, which in turn will lease to Safeway. The deal is a continuation Safeway's long-estab-lished "buy-build-sell-lease" policy, Safe-

#### MARKETING BRIEFS

Reader's Digest has revealed its U.S. and Canadian circulation for the first time in its 32-year history. Tide magazine savs the Digest sold an average of 11,353,823 issues a month from January through March this year. The next nearest magazine, Life, sold 5.4-million a month. The Sunday newspaper sup-plement, This Week, sold an average of 10.6-million over the same period. World-wide circulation for the Digest is over 17.5-million.

Beer prices up: Pabst Brewing Co. has announced wholesale price hikes on its product. Case prices will go up about 15¢, barrel prices \$1.50. Pabst says the increases, which are about 5% at wholesale level, reflect higher labor and material costs. Pabst and other brewers raised wages in July, at the end of the 77-day brewery workers' strike (BW-Sep.5'53,p48).

The Chicago Tribune is bringing out a new 48- to 56-page Sunday magazine as a supplement to its Sunday paper. The magazine will be edited to appeal to the "new leisure" interests of today's readers (page 144), and will carry features on gardening, do-it-yourself, food, child care, and home furnishings.

Special fares for families riding on both coaches and Pullmans will go into effect this fall on Santa Fe trains departing Mondays, Tuesdays, and Wednesdays. One parent will pay full fare, the other half fare; and all children between 5 and 21 years will pay half fare. Santa Fe claims to be the first western railroad with such a plan for coach

## Forecasting Sales with Univac

Bureau of Advertising uses electronic computer to figure the 1954 seasonal pattern . . . Army-post retailing fight continues . . . Safeway plans new expansion.

#### Aid for Advertisers

To help newspapers improve their advertising timing, the Bureau of Advertising of the American Newspaper Publishers Assn. has come up with a forecast of the seasonal sales pattern for

The expected 1954 pattern is based on a projection of trends in seasonal consumer buying over the past 12 years. The Bureau estimates that the pattern during 1954 will nearly coincide with 1952 results. Remington Rand's electronic brain, Univac, was used in making the calculations.

#### Update: Army Selling

The struggle between private retailers and government-sponsored retail establishments is spreading (BW-Aug.22 '53,p61). The latest round is being fought over new regulations which permit the sale of alcoholic beverages in Air Force and Army officer and noncom clubs. Previously, most of these clubs operated on a bring-your-ownbottle basis. A major opponent of the new rules is the National Retail Liquor Package Stores Assn. An official of the association says "the new policy is legally, morally, and ethically wrong."
The PX tussle is continuing, too. The

American National Retail Jewelers Assn. has lodged a stiff protest against the congressional committee report which dismissed retailers' charges that Army PX's sell to private citizens. The association savs the report "contains statements and implications which have the effect of vilifying and castigating the retail merchants of the nation."

On another front, grocers' groups are meeting opposition in their efforts to get the Defense Dept. to close several military commissaries, Sen. Harry Byrd,

# WHY ARE THEY

## REBUILDING

#### THE POWER PLANT?

One morning soon workmen will start removing a turbine and its four associated boilers from The Ohio Power Company's Philo Plant near Zanesville, Ohio.

In these days of heavy power demand, this will be an unusual procedure, especially since this was one of the most efficient electric generating units of its day.

Why are they doing it? And why should you care?

They are removing this old unit from the plant to make room for the most unusual steam generator-turbine unit in the world. This new apparatus will generate three times as much electricity at almost twice the efficiency of the old unit, yet the new unit will require no additional building space and little additional circulating water.

How is it possible to add this large block of highly efficient capacity at Philo Plant?

It is possible because for the first time in history, power plant designers, steam boiler engineers and turbine designers, working as a team, have reached a point where they can smash a natural barrier that has threatened further progress in steam-electric generation. The barrier is "critical pressure," the precise pressure (3206 pounds per square inch) at which it becomes impossible to separate steam and water because they have the same density.

The story behind this achievement goes back over the years. Fifteen years ago, Babcock & Wilcox, in cooperation with the American Gas and Electric System, designed and built an advanced boiler for 2650 pounds per square inch. This boiler, and the special turbine developed for it, established at that time a new level of efficiency for converting fuel into electric energy. It was an important factor in establishing the outside limits of what could be done below the critical pressure. The great strides of the entire electric utility industry in thermal efficiency since that time have been largely within this framework and based on this experience.

Why is it advisable to replace the old unit at Philo?

Our country runs on electric power and the electric utilities are determined to keep it "America's best bargain." Power engineers can never relax their drive, therefore, for higher levels of operating efficiency as well as lowered capital investment. So—even as they were developing today's efficient electric generating plants—power engineers were seeking ways to crack the pressure barrier they knew they would ultimately reach. Thirty years ago—long before there was a commercial need—B&W was exploring, at considerable cost, the properties of steam at pressures above the critical point and as high as 5000 pounds per square inch. This study became part and parcel of multi-million dollar research into all phases of combustion and steam generation.

The result of this ceaseless activity is B&W's Universal Pressure Boiler, a steam generator that can operate above or below critical pressure with equal facility. The first unit for the Philo Plant will have a design pressure of 5500 pounds per square inch. The steam temperature . . . unprecedented at this pressure . . . will be 1150 F.

Many other advanced engineering features will be incorporated in this new boiler. Notable among them will be the Cyclone Furnace, B&W's revolutionary method of firing coal that greatly simplifies the fuel-firing system, increases combustion efficiency, and greatly reduces flyash discharge to the atmosphere.

Paralleling research in boiler design has been the cooperative efforts of turbine engineers and many other designers to develop the machines to utilize this highpressure, high-temperature steam.

Why are they rebuilding the power plant? To make room for progress—to make the lights burn brighter and the wheels turn faster, in pursuit of the American dream. They are doing this because the American Utility Industry . . . dedicated to public service . . . will never cease the struggle to surpass its own best efforts.

And why should you care? Press a light switch, or snap on your television set, or take a look at the electric bills for running your office or factory. There's your answer. Only free men, laboring in a free economy, could make this possible.





## STANDARDIZED • MASS PRODUCED • LOW PRICED ... give you advantages of the most expensive cranes

Now you can select your overhead electric traveling crane by size and type from a catalog. In the new standardized, mass produced Series "D" 'Load Lifter' Cranes you get a crane constructed on design principles that have made "Shaw-Box" Heavy Duty Cranes outstanding performers. For example, only in Series "D" 'Load Lifter' Cranes can you get these 8 crane bridge advantages:

LONG LIFE MECHANISM. All gearing in a sealed housing and operating in oil.

LOW COST OPERATION. Friction reduced to the minimum by supporting every moving part on ball bearings.

MAXIMUM STRENGTH with minimum dead weight because of advanced design and distribution of metals.

**ACCURATE, EASY CONTROL.** Variable-speed magnetic control and bridge brake to control drift assure accurate spotting.

MAXIMUM SAFETY. No open gearing. Cross wires are kept between and inside the girder flanges.

LOW MAINTENANCE. Motor and drive shaft are permanently aligned and all gearing operates in an oil bath.

**EXCEPTIONALLY RIGID BRIDGE** free from whipping and skewing because of its three-girder construction.

LONG WHEEL BEARING LIFE. Wheels are mounted on axles that rotate on ball bearings, equally loaded, on each side of the wheel.

Series "D" 'Load Lifter' Cranes are built in three basic types and three styles of trolleys with manually or electrically operated traverse motion. For floor-control a pendant type push button assembly is provided. On cage controlled cranes operation is by master switches. Get complete feature-facts about every capacity. Write for Catalog 221.



Builders of "Shaw-Box" and 'Load Lifter' Cranes, 'Budgit' and 'Load Lifter' Hoists and other lifting specialties. Makers of 'Ashcroft' Gauges, 'Hancock' Valves, 'Consolidated' Safety and Relief Valves, and 'American' Industrial Instruments.

#### No More Parking

DALLAS-For years everybody's been talking about Dallas traffic, and while the talk went on the traffic situation got worse and worse. About a month ago, however, the City Council, citing the success of a similar plan in Philadelphia (BW-Jan.10'53,p78), proposed a complete ban on daytime parking for a 12-block stretch along Dallas' three major business streets—Commerce, Main, and Elm.

The proposal drew howls of protest from many merchants, particularly the smaller ones, who argued that "the central business district would become a graveyard of ruined businesses." Proponents of the plan countered that traffic congestion itself was what was strangling the business section and forcing the development of outlying shopping centers.

Last week the council enacted the ban on a trial basis; it goes into effect Oct. 5 for 90 days. After that, the council will review the situation, determine whether the new ordinance has been good or bad, and decide whether to continue it.

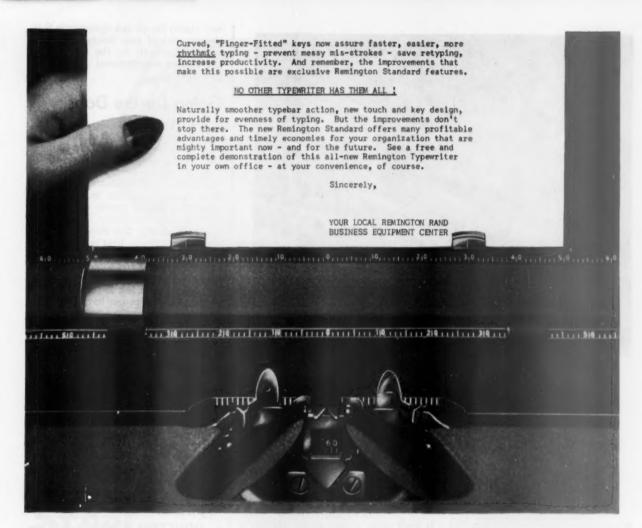
Also last week, the council boosted the fee for meter parking on other downtown streets from 5¢ to 10¢ to discourage "meter feeders," and boosted the fine for overparking in metered spaces from \$1 to \$3.

#### Rent Out the Roads

FRANKFORT, KY.—Revenue-bond issues to pay for new toll high-ways are common enough. But revenue-bond financing of a state's regular primary highway system is something else again. Yet that's just what may be in the cards for Kentucky, if next year's legislature adopts a plan just submitted for its consideration by the Kentucky Good Roads Federation.

Under the proposed program, the legislature would create an authority with the power to issue revenue bonds for road improvements. The legislature would also authorize the Highway Dept to turn over to the authority the roads selected for improvement. The authority would issue revenue bonds, improve the roads with the money, and then lease the roads back to the Highway Dept. for enough rental to cover interest and amortization on the bonds. The Highway Dept. would pay the rentals from an earmarked fraction of the state's 7¢-a-gal. gasoline tax.

The federation suggests that \$162million worth of work be done in this way. Its leaders readily admit that the



# this <u>IDEA</u> from Remington Rand... assures accurate margins...saves typing time!

The idea? The new Perfect Positioning Scale and the new, simplified margin controls found only on today's all-new Remington Standard Typewriter. To set perfectly-balanced margins or headings, typist simply flicks margin controls equal numbers from zero-center—then releases—and she's ready to type! There's no carriage movement...no "margin" mathematics involved. She will notice a real improvement, too, the instant she touches the keys. That's because of new Tested Tempo Touch...the amazing innovation that makes possible fast, accurate, rhythmic

typing. See these new features, plus the new 44-key Keyboard (two extra keys—no extra cost), the new lightweight "Speed" carriage, and the many other exclusive, advancements. Ask for a free 7-day demonstration today. And while you're at it ask your Remington Rand man about the many other work-speeding ideas he has to offer. Profit-building ideas which include: electronic methods, punched-card systems and visible records, and others. Phone him at your nearest Remington Rand Business Equipment Center today. His number is in the phone book.

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this remarkable new typewriter in your office at no cost or obligation. For free trial or free 4-page folder, "Tested Tempo Touch" (R166) write: Remington Rand, Room 1078, 315 Fourth Avenue, New York 10, New York.



## Put out of business for nine weeks

...but we made our regular profit just the same

(A true story based on Company File H-50-5618)

We were the victims of fire-fire that set us on the sidelines.

The blaze broke out in the stockroom of our shoe store, and made a cleap sweep. Hardly a shoe was left. Furniture and fixtures were ruined.

These losses were covered, of course, by fire insurance.

But we had another kind of loss.

It took nine weeks to fix up the store, and to get our new stock of shoes on the shelves.

Fortunately, we carried Business Interruption Insurance. This took care of our continuing expenses, and gave us the full profit we would have made, had we been doing "business as usual."

Suppose you were put out of business for nine weeks?

Whether your business is small or large, there's rent, interest and miscellaneous overhead to pay. And taxes, And salaries. Where would the money come from? How could you get it and your profit, too?

Make Business Interruption Insurance your cushion against loss of income when fire, windstorm, explosion, riot or other insured hazard shuts you down temporarily.

For details about this important, low-cost protection, call your Hartford Fire Insurance Company Agent, or your insurance broker-today.

Year in and year out you'll do well with the

## Hartford

Hartford Fire Insurance Company . Hartford Accident and Indemnity Company Hartford Live Stock Insurance Company Hartford 15, Connecticut only reason for all this rigmarole is that this amount of new bonds could not be issued directly by the state under the present constitutional debt limita-

#### Going for the Dogs

NASHVILLE-Business in Nashville is just about normal in most lines. But there's one exception: The Chihuahua dog business is booming.

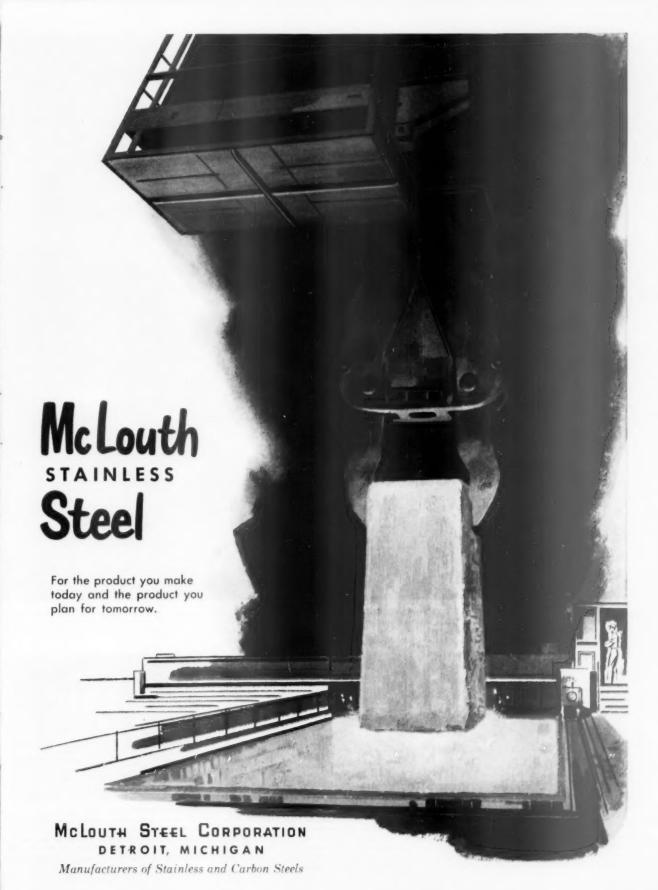
It all started a few months ago when the Nashville Tennessean ran a story in its Sunday magazine section to the effect that lots of people believe Chihuahuas are "medicine dogs," and, more particularly, that they are a good remedy for asthma. Ever since the story appeared there has been a big and evergrowing demand for Chihuahuas. Pet shops and individual breeders have sold the little dogs as fast as they could get them. A lot of people have gone into the business of breeding "asthma dogs." Before the story appeared, registered Chihuahuas sold for \$35 to \$50 each; today pups bring up to \$125.

A lot of people in Nashville will swear that their asthma (or, more often, their children's asthma) has improved since they bought Chihuahuas. And a lot more aren't a bit sure, but would rather be safe than sorry. Even for asthmatics who don't like dogs, there's one compensation: "I'm mighty glad," says one of them, "that that fellow down at the paper didn't write about St. Bernards!"

#### **Updates**

HOUSTON-Last month the Houston Port Commission asked the voters to approve three bond issues totaling \$18-million for port improve-ment. The biggest one, \$9-million, was to buy Anderson, Clayton & Co.'s 30year-old Long Reach docks (BW—Aug.15'53,p118). The Long Reach proposal stirred up a hornets' nest of opposition, led by Jesse Jones' Houston Chronicle (BW—Aug.29'53,p146). Last weekend the voters sandbagged all three proposals. Each needed a two-thirds vote for passage. Long Reach was beaten by 3 to 1; the other two didn't get even a simple majority.

CHICAGO-Citizens' groups and Lake Shore Drive property owners won the first round in their court battle to keep the city from building a waterfiltration plant on a man-made island in Lake Michigan, just north of Navy Pier (BW-Apr.4'53,p94), when a Cook County circuit court permanently enjoined the city from building the plant there. The city is expected to appeal the injunction to the state supreme court.





1 Mr. H. A. Kern, president (right), and Dr. J. W. Ryznar, technical director, of National Aluminate Corporation, discuss a water treatment formula produced by Nalco in ball form. Nalco serves all industries generating steam, softening or clarifying water, or using

water for cooling or processing. Wyandotte not only furnishes Nalco with raw-material chemicals used in water treatments, but also provides industry with many other inorganic chemicals and specialized cleaning products.



2 In Nalco's weed control laboratory, products to destroy weeds are developed and tested. Wyandotte provides chemicals for makers of weed control compounds, also offers DDT, BHC, and Lindane for insecticide formulators; emulsifiers, fumigants, wetting agents and soil conditioners.



3 Here, Nalco produces sodium aluminate, widely used in water conditioning and paper processing. Carbose\* (sodium CMC) and Purecal\* (ppt. calcium carbonate) are Wyandotte chemicals used by the paper industry; Carbose for better sheet formation, Purecal for paper coating.



4 Pulverizing equipment at Nalco is used in processing treating ingredients for potable water supplies. Wyandotte Chlorine, used in the manufacture of drugs and medicines, paper, dyes, rubber, petroleum and plastics, is also widely used to make water safe for human consumption.



## How Wyandotte Chemicals help put water to work for you

H. A. Kern, president of National Aluminate Corporation, knows how much you depend on water . . . and on Wyandotte chemicals to help make it safe and usable.

It takes more than 100 gallons of water per day to keep you going. To make a ton of steel requires 100 tons of water . . . a pound of rayon — 100 gallons. Where does it all come from . . . how is it treated?

The world's supply of water is fixed. It circulates endlessly between sky, ocean and land. Germs and impurities are picked up in the cycle. Chemistry makes water fit for consumption—suitable for industrial use.

National Aluminate Corporation, Chicago, Ill., makes water treatment chemicals for power plants, railroads, manufacturing processes, municipalities and chemicals for weed control and catalytic cracking. Mr. Kern, Nalco's president, will tell you that three of the most important ingredients used in treating water for both industry and health are Soda Ash, Caustic Soda and Chlorine. Wyandotte Chemicals is a prime source of these important raw materials.

How about your business? If you use chemicals, you'll find Wyandotte's experience, facilities and technical service most helpful. Try us on a problem. Send us your requirements and let us work with you. Wyandotte Chemicals Corporation, Wyandotte, Michigan. Offices in principal cities.

\*REG. U.S. PAT. OFF.



Organics, Inorganics—World's largest manufacturer of specialized cleaning products for business and industry



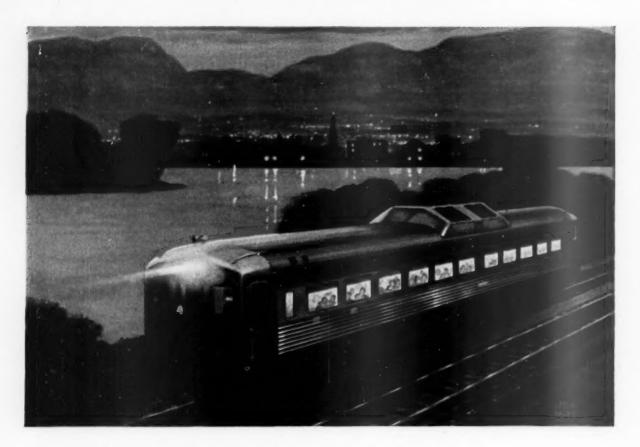
5 Nalco antifoam formulas, prepared for blending in large cooking vats (above), are extensively used in processes where foaming complicates the handling of liquid materials. Wyandotte offers you low-foaming characteristics in a new, nonionic surfactant —Pluronic\*L62. Ask us for free samples.



6 Elevated conveyor belts carry Nalco ball briquette water treating chemicals to the packaging department. Wyandotte products are employed in many of the morethan-50 water treatment formulas produced by Nalco for scale and corrosion control in boilers and municipal water systems.



Research and product control play a vital role in chemical progress. Wyandotte's research facilities are evidence of our trust and faith in the future of chemistry. Let us help you to profit by that future. Bring your chemical problems to us. We're better equipped than ever to serve you.



#### The New Haven's 40 RDCs Get Busy and Business

THE New Haven Railroad now operates 40 Budd rail diesel car RDCs. And the New Haven, RDC, and New Englanders are getting along very well together.

So well, for example, that when the railroad reinstated passenger service between Worcester and New London, after a lapse of twenty-eight years, it carried 82,000 passengers the first year, using one RDC Monday through Friday, and two RDCs Saturdays and Sundays.

Passenger traffic in and out of Boston's South Station has increased by thousands daily.

All over the non-electrified portions of the New Haven's system, scores of new schedules have been added to take full advantage of RDCs ability to provide frequent as well as pleasant service. These include many middle-of-the-day "shoppers" runs, which are proving very popular.

New Englanders take pride in being a little different. But their response to RDC is typical of people everywhere, from Australia to Cuba, from New York to California. The Budd Company, Philadelphia, Detroit, Gary.

DISTRICT
PLONEERS IN BETTER TRANSPORTATION

## INTERNATIONAL OUTLOOK

BUSINESS WEEK SEPT. 19, 1953



Washington is increasingly confident that the European Defense Community soon will become a reality.

Chancellor Adenauer's sweeping victory in West Germany gave EDC its big lift. On the one hand, it removed all doubt about German backing for a joint European army. On the other, it made the French realize that, one way or another, the Germans will rearm.

Then came President Eisenhower's promise to double U. S. aid to the French in Indo-China, reduce the drain on French resources.

The U.S. is trying hard to get France to ratify EDC by the end of the year. Once the French agree, the joint army is in the bag.

Eisenhower will put it up to Laniel when the French Premier comes to Washington later this month. Laniel will be told, in effect, that our aid in Indo-China hinges on his success in getting EDC through the French Assembly.

But Laniel will have two big obstacles to hurdle before he can put the issue to a test:

- He must reach an agreement with Adenauer on the Saar. This won't be easy, even though the German Chancellor plans to visit Paris about mid-October with some big concessions in his pocket.
- To relieve French fears of German domination, Laniel must get the British tied into EDC as an associate member. Though London is now ready to go further than ever before, there is no certainty full agreement can be reached.

If Laniel can get these two issues settled by the end of November, there's a good chance EDC will go through the French Assembly before the new year.

As Paris observers see it, the biggest danger is the possibility that Laniel might be overthrown before the ratification debate begins.

At best, that would mean further delay.

Red China continues to hold out against a Korean political conference on the terms agreed to by the United Nations.

Instead, Peking demands a roundtable conference, which includes neutral nations, especially from Asia.

Washington still thinks the Chinese Reds are only stalling, that they will finally come around. At the U.N. though, there's a feeling that the Korean political conference may never be held.

That wouldn't end the armistice, of course. And it would leave Korea, and other Asian issues, up in the air.

A new economic policy is in fall swing in Pussia. Agriculture and consumer goods are to get a boost such as they never had under Stalin.

The first solid evidence of a shift came with Malenkov's speech of Aug. 8 (BW—Aug.15'53,p27).

Then two developments in Moscow this week removed any doubt:

• The new First Secretary of the Communist Party, Nikita S. Khrushchev, revealed how seriously Soviet agriculture has deteroriated since Stalin put

## INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK SEPT. 19, 1953 through collectivization. The drastic remedies proposed by Khrushchev indicate that Russia is in the midst of a real farm crisis.

• Soviet government departments have been drastically reorganized to step up production and distribution of consumer goods. The need for a revamped distribution system is so great that Mikoyan, long Moscow's foreign trade chief, has been put in charge of domestic trade.

Economy-minded members of the Administration are out to slash foreign aid in next year's budget (page 37).

But the Pentagon, the State Dept., and the Foreign Operations Administration will fight hard for at least \$3-billion in new aid money next year (as against \$4.5-billion this year). They argue that anything less not only would torpedo free world defense, especially plans for West German rearmament, but also would reopen the dollar gap.

From the international economic angle, here's the way the problem looks:

Offshore procurement and a big part of foreign base building are payed for out of foreign aid funds. Together, they are now running at a rate of over \$1.5-billion a year. And that's an important factor in the trade balance that's been achieved recently between the U.S. and the rest of the world.

Upsetting that balance would wreck chances of any move towards convertibility of important European currencies next year (page 166).

Look for a hot fight among European auto manufacturers for the world's baby car market.

Britain already has two baby cars in the field—the Austin A30 and the Morris Minor. (These two have the same engine, produced by the British Motor Corp.)

Now the Standard Motor Co. is in production with its entry, and Ford of Britain is about set to go.

These cars are in the 8 h.p. class (about 25-30 h.p., U.S.). Prices range from \$900 to \$1,100, not counting the British purchase tax.

On the Continent there are three big firms now producing baby cars— Fiat of Italy; Renault and Citroen of France.

These cars are even smaller than the British models, but they suffer competitively from high production costs in both Italy and France.

So far Germany has concentrated on the Volkswagen—a small car, rather than a baby car. But the Germans have plans for a baby car which they hope will give the British a run for their money.

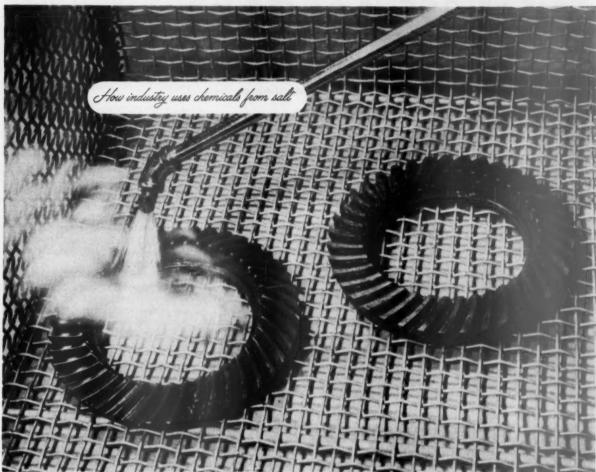
The London stock market is taking no notice of the slide on Wall Street.

British government stocks continue the steady upward climb that started a year ago. Industrials have been rising for four months, last week broke through the year's previous high.

Department store stocks have been taking the lead in London's bull market. There has been heavy buying for stock control.

The mood in London is still bullish, despite a growing belief that the U.S. is heading for a recession.

Contains convergence mader the powered contribution the Sort. 18, 1933, Issue-Business Wash, 580 W. 42nd St., How York, N. Y.



#### Photo courtesy of Detrez Corporation

## Now they're drycleaning GEARS

The greasy gear at the left is dunked in a cloud of hot vapor. Instantly, grease starts to dissolve and slide off.

More vapor hisses gently from the spray lance-penetrating every recess.

In as little as 10 seconds, the gear is clean, warm, and dry-ready for the next stop on the production line.

No ordinary solvent, this. For one thing, it's safe—can't burn or explode. It's heavy—the vapors stay put and don't blow around or escape. It won't attack even the softest alloys.

It's called trichloroethylene. It's made by Hooker-Detrex Corp., a jointly-owned subsidiary of Hooker and the Detrex Corp. It's marketed by Detrex. It's used by many industries for degreasing gears and other metal parts.

Just one more example (there are hundreds) of how an industry (like yours, for instance) can call on us to help make a product or a process better.

We make nearly 100 chemicals regularly from common salt—one of the cheapest, most plentiful raw materials in the world. We also make them to order, to meet industrial needs.

In this case, it's cleaning gears. In your case, it might be—you name it.



What chlorine and alkali chemicals are doing for industry Free 24-page illustrated booklet tells in nontechnical language how industry is using chemicals made from salt. Also lists Hooker products and processes. For your copy, write us at 21 Forty-Seventh Street, Niagara Falls, N. Y.

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HOOKER CHEMICALS

## BUSINESS ABROAD

## Coming: A Showdown on Money

- The International Monetary Fund meeting pushed the free world closer to currency convertibility.
- More agreement showed up in off-the-record talks, and conditions for convertibility were clarified.
- But a lot of U. S. and foreign obstacles will have to be cleared away before it can become a reality.

On the surface, the annual meeting of the International Monetary Fund and the World Bank held in Washington last week was as uneventful as any since the devaluation crisis of 1949. But when the routine hubbub of speeches was over, the assembled finance ministers and central bankers had succeeded in nudging the free world a step nearer to a decision on currency convertibility and free multilateral trade.

The round of talks left no further

doubt about three things:

• The governments of Western Europe as well as the British government are determined to strive for convertibility. That wasn't certain when the British first put the Commonwealth convertibility scheme up to the new U.S. Administration last March. Then the Continental countries were frankly frightened of the idea.

• Everything depends now on whether the U.S. decides to underwrite convertibility with a stabilization fund and with a more liberal trade policy. But this decision must wait on the recommendations of the joint commission which President Eisenhower has asked to study U.S. foreign eco-

nomic policy.

 If a recession comes in the U.S. in the next six months and leads to further delay in American policy decisions, convertibility and free trade almost certainly will become academic issues.

• Speaking Up-Both the speeches at the IMF meeting and the off-the-record talks showed that some progress has been made since last March.

Reginald Maudling, chief British delegate, said bluntly that the Commonwealth still intends to push for convertibility, though he made it clear that Britain would not move without backing from the U.S. The Continental countries, almost without exception, said unofficially that they would go along with any feasible convertibility scheme which is underwritten by the U.S.

U.S. spokesmen were unable, of course, to make any specific commitments. But Treasury officials openly backed convertibility in principle and they weren't as coldly noncommittal in behind-the-scenes talks about the U.S. responsibility in this field as they were last March.

• British Hurdles—This general agreement to make convertibility a prime policy objective is about all that could have been expected out of the Washington meeting. In fact, given the inability of the U.S. to act now, it was

quite an achievement.

But it's a long step from good intentions at the government level to a concrete move to convertibility. A lot of pressures could develop in the next year which would shatter the relatively fragile agreement achieved last week in

Washington.

True, there's no doubt at all that the Churchill government has made up its mind that convertibility and freer trade would be in the best interests of Britain and the Commonwealth. British officials are afraid that the British economy is in danger of stagnation unless trade and currency controls are relaxed. What's more, these officials feel that for both political and economic reasons trade must be freed on a worldwide basis.

However, there are strong forces in Britain, in the Conservative as well as the Labor party, which have opposed convertibility from the start. The long delay in getting started on a concrete program has given these forces new ammunition. They now argue that the U. S. isn't really interested in convertible currencies and freer multilateral trade because that would increase foreign competition in the U. S. market. So these British protectionists argue that the sterling area should seal itself off from the dollar world by strengthening preferential trading arrangements in the nondollar world.

• Europe's Fears—Many Europeans also fear convertibility. The European Pay-

ments Union almost certainly would be doomed by any move toward general convertibility, since this would bring a worldwide currency clearing system into being automatically. With the EPU out of action, the debtor countries in Europe would no longer have the generous credit arrangements which are built into EPU.

Supporters of European unification fear convertibility for political as well as economic reasons. They see EPU as the embryo of a European central banking system, are afraid that its destruction would stall progress toward

European federation.

• Recession Specter—Meanwhile, the fear is growing in Europe that a U.S. recession is just around the corner. This has intensified the struggle between the friends and foes of convertibility.

The opposition forces insist that the sterling area and Western Europe must lose no time in freeing themselves from dependence on the dollar economy lest it collapse and take the rest of the

world down with it.

Those who favor convertibility are anxious to achieve it before any business downturn comes in the U.S. They believe that convertibility, backed by an adequate stabilization fund and by a liberal U.S. import policy, would be the best padding against the effects of a U.S. slump. Also they fear that if there's a recession here before convertibility is achieved, the whole project might have to be postponed indefinitely.

\*Trade Balance. The striking improves

• Trade Balance—The striking improvement during the last year in the U.S. balance of payments with the rest of the world is a big factor in the eagerness of foreign governments to press ahead with convertibility and freer trade. For over a year now, U.S. trade has been roughly in balance. On top of that, the U.S. has been pumping about \$2-billion of economic aid into the world economy.

This has permitted the outside world to add a roughly equal amount to currency reserves. In such a situation, foreign governments figure they can seriously consider dispensing with the currency and trade controls which now limit the sales of foreign goods abroad.

Still, most trade experts in Europe regard this balance as precarious. For one thing, it's dependent upon a continued high level of U.S. military spending abroad. For another, it is dependent on a continued high level of U.S. imports.

· Policy Question-For other countries,

## YOUR NEW PLANT WILL GROW IN THE ERIE AREA









## Here's the middle-sized townright site for your plant!

• Where are the new plants going? Figures show that the middle-sized town is getting the major share because of its opportunities for better living for all personnel.

These pictures from middle-sized towns in the Erie Area, give you some idea of their better life. Their social and recreational facilities make for better human relations-an intangible that

finds its way into the company's balance sheet.

Then, of course, industry has room to grow in these middle-sized towns in the Erie Area that fit in with the Government's Dispersal Program.

The Erie Area is in the heart of the nation's largest single market. Onethird of America's people live, work and buy here. Raw materials, production and markets are close together.

Industry is served by the dependable Erie Railroad which connects direct with New York Harbor for export business and offers unsurpassed service between New York and Chicago and nationwide by connecting railways.

Our experienced personnel will be glad to discuss desirable locations with you-in strict confidence, of course.

## Erie Railroad

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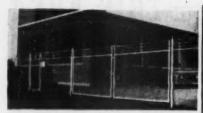
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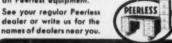


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the biggest question mark in the whole situation is still U.S. foreign economic policy. The U.S. must make some radical policy changes within the next year if convertibility is to be achieved. Whether or not this country will make them depends first on what the joint commission recommends to Congress.

The commission is pretty evenly balanced between protectionism and lib-eralism so it's impossible to predict which way it will lean and how far. However, even if the commission takes the freer trade view, it will be tough for the Administration to force more liberal foreign economic policies through Congress in an election year, though how much Congress will swallow will depend partly on how hard the Administration is prepared to fight for a more liberal trade policy.

· Clearer Picture-In any case, after last week's meeting, the commission will have a better idea of what the minimum U.S. contribution to a common convertibility drive must be. In fact, one of the most important achievements of the IMF conference was the clarification of this point. The requirements stack up this way:

No further protectionist moves in the waiting period before the joint commission reports. Such moves would strengthen foreign opposition dangerously. So if the Administration wants to keep the road clear for convertibility. it must block current drives to impose

new duties on wool, lead, and zinc, and it must not discriminate against foreign bidders under buy-American legislation.

A minimum trade liberalization program would include removal of the escape clause in the Reciprocal Trade Agreements Act. This can choke off foreign attempts to boost sales in the U.S. market if they are successful. In addition, the Administration must announce unequivocally that it intends to lower U.S. trade barriers over a period of time. Buy-American policy must be clarified, and progressively liberalized.

Convertibility must be backed by a sizable currency stabilization fund. There's pretty general agreement that the IMF is the logical organization to do this job. But foreign governments want to cut down U.S. influence in

the IMF, increase their own.
What's more, there's still disagreement, especially between London and Washington, as to how big a fund is needed. The British would like to see the fund's dollar resources boosted from the present total of \$3.2-billion to about \$7-billion. Otherwise, they feel convertibility would be too risky, that it might backfire as it did in 1947.

This clarification of means and ends at the IMF conference clearly has put a new sense of practical realism and purpose behind the movement for convertibility. But it has also put the U.S. on the spot-at least in the eyes of the outside world.



#### New Container Guards Against Pilferage

Transportainer is the name Dravo Corp. of Pittsburgh has come up with for the welded steel container it's developed to protect goods from damage and pilferage during shipment. Above, one of them arrives at

Casablanca. This model, with a capacity of 275 cu. ft. is being used by Natural-Nydegger Transport Corp., New York freight forwarder to tranship U.S. goods from Switzerland to North Africa.

## No Left Turn for Britain

That's the notice that the Trades Union Congress has served on the Labor party. What TUC wants is the consolidation of the workers' gains.

The Trades Union Congress, mainstay of Britain's Labor party, has hung a warning sign in front of party leaders as they prepare for Labor's upcoming annual conference. The sign says, "No left turns allowed."

The TUC gave this warning in no uncertain terms at a congress held last week on the Isle of Man. And since the TUC supplies the lion's share of the Labor party's funds as well as most of its voters, there is little doubt that party leaders will heed the warning. Otherwise, the Labor party would split wide open, destroying itself as an effective political force in Britain.

• Feud—This is the first time since the early 1930s that the TUC has intervened so decisively in party affairs. It has done so because of the bitter feud between the rightwing group led by former Prime Minister Clement Attlee and Herbert Morrison, and the left-wingers led by Ancurin Bevan.

It was the death first of Ernest Bevin and then of Sir Stafford Cripps that weakened the Attlee-Morrison wing of the party, gave Nye Bevan his chance to try to pull the party left toward allout nationalization and a 100% planned economy. But the more Bevan has talked up this line and the more he has attacked the moderate union leaders in his weekly paper, The Tribune, the more opposition he has aroused in the TUC. Today the TUC Council wouldn't tolerate Bevan as leader of the Labor party.

It is the very things that the Bevan extremists clamor for that the TUC voted against last week. It voted against further nationalization (except for water supply), against national minimum wage rates linked to the cost-of-living index, against the representation of workers on the executive boards that run the nationalized industries. The TUC Congress also defeated a leftwing attempt to halt the present union-management efforts to raise productivity in Britain.

• Consolidation—What the union leaders want is to consolidate the economic and social gains that British labor has made in the past 10 or 12 years. They realize that the wildest dreams of British workingmen over the past century have been fulfilled since 1940:

Collective bargaining has been anchored in law.

 The right of the unions to be consulted by the government on economic policies has been firmly established.  The welfare state has arrived with free health service, comprehensive unemployment insurance, widespread pensions and compulsory holidays with pay.

 Incomes have been redistributed by steeply graded taxation.

• Full employment has become a main object of government policy. The bulk of these gains has been

The bulk of these gains has been achieved in Britain since Labor entered the wartime coalition government in 1940, especially since Labor took office in 1945. It is the record the Labor party chalked up in this field and not what it did in nationalizing industry that counts with the union leaders and with most rank-and-file workers.

• Steel Industry—For the TUC, nationalization had only marginal interest, except in the case of Britain's run-down coal industry. The steel workers union was never enthusiastic about steel nationalization, though it accepted the policy once the Labor government decided on it. It is working today for a smooth transition back to private enterprise, now that the Conservatives are denationalizing.

Union leaders have become realistic even about the economic cost of the social gains British labor has made. They realize that these reforms have placed a heavy burden on the British economy—so heavy that it will be bearable only if productivity can be raised at a fairly fast pace. They know that the gains could be lost if Britain's competitive position in the world cannot be maintained.

That's why the TUC has been increasingly urging British workers to work with management for higher productivity and to go easy on claims experiments until the country's position in the world looks more secure.

• Bolstered—It is too soon to tell precisely what impact the TUC's stand will have on the Labor party. The chances are, though, that the Attlee-Morrison group will now screw up enough courage to squelch the Bevanites at least temporarily. The trouble is that the moderates have no real alternative policy to the Churchill-Butier policies.

The local political parties, where Bevan's support is strongest, want something to promise the electors at the next election and some strong lines to use against the Tories. Bevan gives them both with his talk of more socialism, and more social gains.





## Thumping for British Trade

Treasury prods UK merchants with sliding trade share figures . . . Plan for stabilization of hemisphere currency . . . Swiss trains to Rio Grande . . . Business for Adenauer.

There's always talk in Britain about increasing exports. But to which markets? The latest Bulletin for Industry, published by the Treasury to jog businessmen into some fruitful thinking on a variety of subjects, says Britons should now concentrate hard on the U.S., Canada, and certain Latin American, European, and Middle Eastern nations.

What worries the Treasury most is that in two of these five plump markets Britain's share of the business is less than it was in 1948; in the other three Britain's share has remained constant since that date, but no gains have been chalked up in any of them.

• Sliding—Canada, traditionally receptive to made-in-England goods, is a troublesome example of lost ground. Canadian imports over-all have increased 50% since 1948, yet Britain's business there increased only 20%.

The situation is pretty much the same on the Continent. In the Netherlands, Sweden, Portugal, Belgium, and Switzerland, Britain's share has shrunk over the past few years, with West Germany the chief villain. Those nations' imports jumped one-third in two years; Britain's sales to them are up only one-seventh.

• Need to Hustle-In the U.S., Latin America, and in the Middle East countries of Iraq, the Sudan, Syria, Kuwait, and Lebanon the picture is somewhat brighter. British exports have held their share of a widening U.S. market. Britain's share of the market in the important dollar countries of Latin America has also held up since 1948, but it's way under prewar, and the Treasury stresses the need of getting busy there, fearing a possible future decline.

The same goes for the Middle East countries. Britain has been doing pretty well percentagewise, but the Treasury figures it could increase its volume with a bit of digging.

#### Hemisphere Currency

Like many U.S. businessmen who are old Latin American hands, J. Peter Grace, Jr., president of W. R. Grace & Co., is concerned about the future of U.S. investment and trade in the hemisphere. Last week he proposed a bold program to stimulate investment and help the Good Neighbors unravel some of their currency problems.

Grace wants Washington to establish a United States hemisphere stabilization

fund—with resources up to \$2-billion—to provide currency convertibility for U.S. companies operating in Latin America. Eligible companies could buy dollars to send home from the fund with their earnings of pesos, cruzeiros, or what-have-you. Dollars representing profits would be bought at the going exchange rate; dollars representing amortization of the original investment would come at the rate prevailing at the time of investment. The maximum allowed would be 15% of the original yearly capital.

Plenty of U.S. investors would welcome such a scheme. Exchange problems have plagued them off and on in many Latin countries, with Brazil as the most recent and striking example. Moreover, Peter Grace hopes such a guarantee program would encourage new investors, who have been increasingly leery about putting their money to work in Latin America.



#### Swiss Trains for Mexico

The Mexican National Railways has sent the first of three new super-de luxe Swiss passenger trains highballing north from Mexico City to the Rio Grande.

Complete with showers, 24-hour bar service, hostesses, and Pullman Co. management, the trains are Mexico's hope to recapture some of the thousands of fares lost each year to the airlines. Of roughly 400,000 U.S. visitors in Mexico last year, only a trickling 18,000 came by rail. American Airlines alone carried four times as many.

The new equipment, built in Switzer-

land by the Schindler Works, is a railroad buff's delight-lowslung, smooth, with what seems like every conceivable gadget. Air-conditioning and kitchen equipment for the nine-car trains were bought in the U.S., then shipped to Switzerland for installation. The total cost was a lot less than that for similar equipment made in the U.S.: \$3-million.

That's a drop in the bucket compared to what is being spent to rejuvenate Mexico's vintage railroads. It's involved some \$150-million over the past six years—for new tracks, 57 French passenger coaches, 1,600 U.S. freight cars and 140 diesel locomotives.

#### Rhine Minute Men

Last week, four days after West Germans went to the polls, Americans learned of a big-scale campaign put on by a group of West German businessmen to push the Adenauer ticket. In a New York Times advertisement, the Society for the Promotion of Social Adjustment hailed Chancellor Konrad Adenauer's win as a victory for private enterprise, proudly declared that it had played "no small part" in making it possible.

This group, which dubbed itself "Minute Men on the Rhine" in the Times ad, was set up in October, 1952, as a promotion outfit for German businessmen supporting the policies of Adenauer's finance minister, Ludwig Erhard. It represents 150 large and small firms, is led by Franz Creiss, head of the Cologne Chamber of Commerce. · Ad Men-The society's aim was, and is, to convince Germans that free enterprise is the best deal for everyone, that they should keep in power a government that follows that principle. To put this message across, the society hired one of Germany's top advertising agencies. Since last October it put on a big newspaper campaign-a series of 21 ads appearing in over 400 daily papers with a total circulation of over 11-million.

Stars of this campaign were Fritz and Otto, two mythical, but supposedly typical, German men-in-the-street. Most of the ads pictured these two men discussing the election. They didn't talk about foreign affairs, stuck to such topics as wages and the availability of goods and services. The society feels that this emphasis paid off, with a lot of people voting on the basis of personal economic considerations rather than on broader political issues.

Still in Action—A lot of factors contributed to Adenauer's victory, but the society figures that the ad campaign played a big part. It won't quit now: It plans another campaign to acquaint Germans further with the economics of free enterprise.

#### BUSINESS ABROAD BRIEFS

Friedrich Krupp & Co., of West Germany, got another contract to build a steel mill in south Asia. Last month it was India (BW-Aug.22'53,p104), now it's Pakistan. Krupp is surveying Pakistan iron and steel resources. In November it will submit plans for a 15,000-ton-a-year pilot plant to open in 1954. It will also blueprint a 300,000-ton-a-year mill for possible construction later.

Free fish for beefeaters: This week special stalls and regular outlets in Argentina gave away free fish to all comers. It's part of President Peron's campaign to woo Argentinians from their traditional beef diet. He says he's thinking only of their health, but the beef shortage is probably at least as big a factor.

S. C. Johnson & Son, Inc., The Racine, Wis., wax products firm, opened a subsidiary in Hamburg, West Germany.

Britain and Brazil agreed on a plan to settle the \$176.4-million in trading debts that Brazil owes Britain, according to the British Treasury. After an initial payment of \$28-million, Brazil will pay \$16.8-million a year till the debt is cleared up.

World airlanes: KLM Royal Dutch Airlines got the first of the 12 Convair-Liner 340's it ordered early this year... Japan airlines, which has had a monopoly on Japanese local air service, is about to get some competition. Five firms have applied for domestic licenses, and the Japanese government says two or three of them will get the go-ahead this month.

U. S. machine tool makers are losing the Latin American market to German, Swiss, Czech, Danish and Swedish firms. That's what Melvin Stone, president of Machine Affiliates Inc., told the 20 firms that make up that organization at Cincinnati last week. He said U. S. makers have the quality, but the Europeans offer lower prices, easier financial terms, speedier delivery.

The Pictures—Black Star—144 (bot. ctr., rt.); Cal-Pictures—79 (top); Fairchild Aerial Surveys, Inc.—80; Ewing Galloway—96; I.N.P.—31; Bob Iscar—Cover, 134, 135, 136, 137; Carl Iwasaki—51; Herb Kratovil—66 (bot.), 67; Magnum photos—144 (bot. lt.); McGraw-Hill World News—170; Parade photo by E. D. Fales—144 (top); Smiths Racing photos—66 (top); United Press—28 (2nd from top); Dick Wolters—108, 109, 110, 111, 120, 121, 122.



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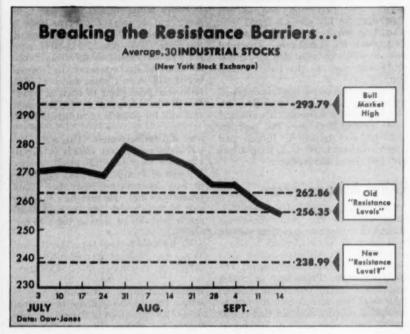
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## THE MARKETS



## **Bulls Take Shellacking but**

These are trying days for the Wall Street bull. He was no end disturbed, early this year, when the turn in prices interrupted his long ascendancy. He was saddened when the traditional summer rally came to little or nothing. And the indignities that have been visited on him in the last few days shouldn't happen to a dog.

Stocks plummeted on the Big Board again on Monday of this week.

The decline—in trading of more than 2.5-million shares—carried the Dow-Jones industrial stock average (left hand chart) through the last of the old resistance levels—the 256.35 point—to the lowest point since July 20, 1951.

The rail average (right hand chart), which plunged through the old 99.58 resistance barrier last month, tilted lower with the industrials group, hitting a new 1953 low, but finishing above last year's rock bottom level.

• What's Next?—With these old barriers broken, many in the financial district were asking:

"How far and how long?"

If the downtrend continues, will the drop in the industrials stop this side of the 238.99 (1951 low) resistance level?

For the rails, will 85.50, a low point at which the carriers rallied and recovered in the latter half of 1951, prove stronger than the old barrier broken last month in the current retreat?

Investors were raising these questions even on Tuesday, when after backing and filling, the market finally closed with a fair gain in trading of over 2.8-million shares.

The best that the Street's bravest bulls—the market letter writers—could say for the Tuesday rally, however, was that it was a "technical" one, although well-supported.

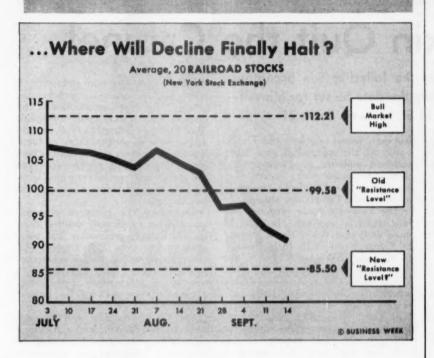
For the long-term, they saw the basic trend still downward, with a testing of new resistance levels still very probably

• Viewpoint—One middle-of-the-road observer, watching the news ticker during the Monday decline, neatly summed up the views of many, when he said: "Stocks are being bought on the basis of this year's corporate earnings, and sold on next year's prospects."

It's not hard for the bears to cite the significant factors behind recent market weakness.

For months, the storm warnings have been out. To list a few:

- Steel production no longer continues at capacity, and further reductions in the operating rate below the present 90.3% of capacity can be expected if auto output is cut back materially.
- Assembly of passenger automobiles this year may approach 6-million units, but most people doubt that



## the Street Remains Calm

unsatisfied demand is great enough to assure another production year of this size in 1954 (page 27).

After eight years of break neck house construction, with output now geared to over 1-million units annually, many are wondering how long builders will be able to find buyers for all the houses they wish to put up (page 190).
Bullish Arguments—On the other hand, the bulls hold that there are bargains to be found today in the market—that prices of many stocks are very attractive, from the standpoint of both present earnings and size of dividends.

They add that many companies have a well-protected dividend rate, and that earnings could drop a considerable distance without forcing a cut in rate.

And, with around 63.4-million per-

And, with around 63.4-million persons working, they contend that income is still high enough to keep consumer lines humming.

Future foreign aid, and the general world climate, as far as thoughts of peace are concerned, are all factors that influence investors.

As far as the recent weakness in stock prices is concerned, most people in Wall Street are outwardly calm. There is still fat under the skin of the average Exchange member brokerage firm, and on the ribs of the average postwar investor.

It's a declining market—but as yet there's no distress. And none is expected.

• Wide Markets—There is, however, no disputing the breadth of the current market. Of a total of 1,526 issues listed on the Big Board, 1,217 were trades on Tuesday, 1,209 on Monday, 1,202 on Friday of last week, and 1,084 on Thursday. That shows the recent fireworks haven't been confined to a narrow segment of the list.

On Monday, when the downturn was the sharpest of recent sessions, 993 of the issues traded showed declines on the day, and of these, 539 established new lows for the year. Advances numbered only 53.

In Tuesday's "technical" rally, 491 issues scored advances, and 479 retreated. Of the losers, 417 chalked up new 1953 lows.

When the shares were running on the downside, there were no significant exceptions among the targets. Even old favorites such as American Telophone & Telegraph gave ground on the declines.

Most actively-traded stocks included U.S. Steel, Republic Steel, Standard Oil of N.J., Radio Corp., Packard, International Telephone, New York Central, Baltimore & Ohio, Pennsylvania Railroad, and Chicago, Milwaukoe, St. Paul & Pacific.



Possibly the greatest all-round athlete in American sports history, Jim Thorpe, starred as brilliantly in football as in track or baseball. Playing for the Carlisle Indians in 1908, 1911 and 1912, he was a fast, crashing ball carrier and a bruising tackler. Selected All-American in 1911 and 1912, he racked up 198 points in a single season (1912) — a record exceeded only once in modern football.

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## LABOR

## Why Durkin Quit the Cabinet

As Secretary of Labor, he failed to win acceptance for Taft-Hartley changes before the date he set for himself—the AFL convention opening in St. Louis on Sept. 21.

Martin P. Durkin, Dwight Eisenhower's first Secretary of Labor, had a job and a deadline. The job was defined by the President and enthusiastically accepted by Durkin. It was to take the controversy out of Taft-Hartley by seeing that the embattled statute was made fair, workable, and nonpolitical. The deadline, Durkin set. It was the AFL convention scheduled to open in St. Louis on Sept. 21.

Last week, when it became clear he couldn't make his deadline, he quit.

The two things interfered with each other. In the first instance, Durkin's ideas and the President's of what would be "fair" needed a lot of reconciling. In his campaign statements and in his inaugural message, Eisenhower cited a few substantive provisions of the law that, he said, needed overhauling. He indicated he had an open mind. Durkin, in competition with conservative Republicans and employer spokesmen, sought the President's support for his own—and the AFL's—ideas of fairness. It was slower work than he had hoped.

• Single-minded—With unbureaucratic single-mindedness, he sacrificed all the other interests of his position to the T-H issue. He didn't blow his top when the men he wanted appointed to work with him didn't get named. He didn't get sidetracked when his department's appropriations got cut. And he did no sulking when he concluded—what all of Washington gossiped about—that he was the poor relation at

the Cabinet table.

He conserved all of his strength for the T-H fight. For example: At an early Cabinet meeting there was a discussion on whether a Labor Dept. bureau concerned with agricultural labor standards should stay in Labor or be reorganized into the Dept. of Agriculture. Agriculture Secretary Benson had come all prepared with weighty arguments in favor of the change. He was open-mouthed and flabbergasted when Durkin said he didn't care. Eisenhower grinned, said that's the old teamwork spirit; then Benson had to echo he didn't care either. In the early months of his Administration the President used the story to show how well his team was pulling together. When the President next heard from Durkin he

had every reason to believe that Durkin would ask the approval of some laborendorsed nominee in return for the show of teamwork spirit. Instead, Durkin used the President's expansive mood to talk Taft-Hartley changes.

• The Leak—He made progress. Just how much is uncertain. But the famous draft of a White House message to Congress on T-H that "leaked" to the press (BW—Aug.8'53,p37), and that was subsequently labeled by the White House staff a "semi-final draft," reflected the Durkin views. If the publication of that draft (and the death of Sen. Taft, which made singularly inappropriate the immediate sending of that particular T-H message to the Hill) had not served to mobilize a powerful opposition, the Durkin ideas might have become the official Administration position.

But what was for Durkin the premature release of the message was also for him a clean miss of his self-set deadline. It is conceivable that, if he stayed, a long period of painstaking work could have retrieved his position, enabled him to overcome the powerful forces working against his view of how the law should be changed, and secured for him, finally, the solid support of the President. But that would take time—a long time. And he was determined to meet his fellow leaders in the AFL next week as a man who had succeeded or as a free agent.

• Amendments—The explosive message that never got sent to the Hill plumped for 19 amendments to the law-of which two are those that AFL insists

are the minimum it seeks.

One of them would nullify right-towork laws in 14 states banning compulsory unionism as far as the laws apply to businesses that affect interstate commerce. It would permit unions in those states to bargain for the union shop permitted by Taft-Hartley.

The other amendment would relax the secondary boycott ban as it applies to big construction projects, the object being to make it permissible for AFL building trades members to walk off or picket a job when some nonunion subcontractor comes on.

There were others equally controversial, some of which were sprung by surprise. Like the one permitting a union to have a member fired for disclosing "confidential information of the union." Others were noncontroversial; some had been offered by Taft himself at one time or another. One of these was the concession to the construction industry, permitting pre-hire contracts and reducing the probation period from 30 days to seven before a worker need join the union.

• Omissions—The group of proposed amendments significantly omitted some on which there presumably had been agreement between Taft, Durkin, and others trying to put an Administration package together. Most important, setting up an independent Taft-Hartley administrator in place of the general

counsel.

The Durkin incident, however, appears to have hardened the positions on both sides so that there is practically no chance of getting any agreement on Taft-Hartley amendments. The White House may send a message asking for amendments that don't go as far in labor's favor as the original set, but they will still go too far for this Congress to accept. It looks now as if there will be no T-H revision until after the election of 1954.

• New Secretary—Two new voices will enter the discussions on Administration policy on T-H. One will be the new Secretary of Labor, who most certainly will be more middle-of-the-road than Durkin. The other will be J. Jack Martin, who was Taft's assistant in the Senate. Martin has been added to the White House staff to handle relation

with Congress.

Durkin's resignation had been urgprivately by many labor leaders. Cli-President Walter Reuther confide months ago that he felt the AFL win a compromising position with the Administration because of Durkin's presence in the Cabinet. Dave Beckpowerful boss of the AFL teamsters, said flatly last spring that Durkin ought to resign. AFL President George Meany expressed no such sentiments, but it is known that Durkin discussed plans to resign with Meany. The decision to resign, however, was Durkin's.

Meany no doubt was relieved over the resignation. Reflecting the extent of labor's break with the Administration, Meany said Durkin's action "places our relationship with the Administration in its proper perspective."



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STUDENTS at Cornell's labor relations school hear "guest professors" from the unions.



ON FIELD TRIPS such as this one to a Pennsylvania coal mine they quiz management men on the job.



"SHORT COURSE" sessions draw groups like these lumber yard managers to Ithaca to bone up on personnel practices.



UNIONS also send "short course" students. This is a graduation ceremony for local union officers of CIO's Steelworkers.

## At Cornell, Labor Relations Is a Profession

It still isn't old-fashioned for a company or a union to train its own labor relations experts from scratch, but it's becoming so. This fall, a handful of colleges, mostly in the East, are accelerating a recent trend in higher education: the guiding of students toward a professional degree in the field of industrial relations.

The New York State School of Industrial Relations at Cornell University, which will enroll its ninth class next week, claims to have been the first to offer a "comprehensive program of professional training at the undergraduate and graduate levels" in this field. As a professional school it hasn't grown any ivy yet. But it is going ahead fast with plans to make industrial relations work as much a full-fledged profession, re-

quiring college-training, as law or engineering.

• Thoroughness—Cornell is doing this by the simple expedient of training its students so thoroughly and, above all, so practically in the various skills called for in labor relations that its graduates are finding no trouble getting preferred spots in business, labor, and government.

When the school made a survey of its alumni this spring, it realized its youth was showing; but its training was, too. The average alumnus of the young school is only 30 years old. He's working in the personnel department of a large manufacturing company, and is just getting started in industrial relations activity. His annual salary so far is about \$5,000. Already this average

"labor" graduate is earning as much as his counterpart in engineering or other professional fields.

• A Mixture-Students at Cornell's Industrial and Labor Relations School (called ILR for short) come from varied backgrounds. Some are sons and daughters of active labor union people, some are from families connected with management, and many come from families that have no connection whatever with the field. Most have specific goals in mind: union administrative, organizing or research work; industry labor-relations jobs; or government careers.

ILR was established by the New York legislature as a state-supported school to be administered at Cornell University in Ithaca. (This is just one of a number of units of New York's state uni-

versity system that are set up on private college campuses in the state.) New York's Sen. Irving Ives, then leader of the State Assembly, was a prime mover in founding the school and served as its first dean.

• Practical-Last session, ILR had 300 undergraduate and 60 graduate students enrolled. To train its students, the school hits hard on the practical side. Right off the bat, ILR freshmen get a foretaste of what their chosen work will be like. In a required course, called the "bus-riding course," they make weekly field trips to factories and mines in the central New York-northern Pennsylvania area. To get an all-round picture of labor and industry at work, they go to big corporations, small firms, unionized plants and nonunion plants.

Before taking off on these assignments, students read up on the industrial relations practices usually found in the type of industry they're scheduled to visit. That primes them to question the managerial staff, the employees, or any union representatives who may be around. Some companies hold industrial "seminars" for the Cornell students, bringing in representatives of their production, sales, research, and engineering staffs, as well as industrial relations men.

While the other courses taken the first two years are for the most part preparatory and background subjects, the last two years are almost entirely concentrated in industrial relations.

• Experience-The 38 faculty members dwell not in ivory towers. Besides the customary weight of Ph.ds (24), most of the school's instructors have had actual experience in industrial relations.

Keeping out of the clouds as much as possible, ILR is strong for bringing in visiting lecturers from industry, labor, and government. Students taking contract-making and administration last semester, for example, heard talks by representatives from General Motors Corp., the United Auto Workers (CIO), and the impartial umpire for the General Motors-UAW collective bargaining contract. The three told students their versions of how the contract was being administered.

To brief the students on health, welfare, and pension plans, ILR brought in New York and Washington experts from two top-management consulting firms on pensions and health and wel-

fare plans.

· "Vacation"-Probably the most severely practical aspect of ILR, from the students' point of view, comes during summer "vacation." The school requires all undergraduates to take jobs for at least 10 weeks each summer.

The school can usually get the job for them and prefers, if possible, that one summer's job be with management, one with labor, and one with a government agency. But this, it admits, is not always possible.

In its graduate program, the school gives two degrees: a master's and a doctorate. Graduate students can concentrate on any of the eight major fields that have grown up in industrial and labor relations: collective bargaining, mediation, and arbitration; economic and social statistics; human relations; industrial education; labor market economics and analysis; labor union history and administration; social security and protective labor legislation; and personnel administration.

Independent thinking by students is the big thing with ILR. To encourage this, assignments call for special research projects. Thus, a student in the contract-making and administration course may have to go out and make an on-the-spot study of a contract actually in operation at some factory.

• Extension Work-Since ILR is a state-supported school it has made all of New York state its campus in a sense.

ILR's extension division conducts about 300 courses, institutes, and lecture series every year. Courses and lecture series are usually given once a week for six to 15 weeks, while institutes may vary from one day to two weeks in duration.

· Human Relations-This fall and winter, ILR is giving two separate but identical courses in "human relations" for executives. One starts Nov. 1; the other Jan. 17. A similar four-week course held last year was so successful that it is being repeated twice this year. Attendance is limited to 20 for each course. The big objective is to show participants how to get results through people, to use manpower effectively.

The plan of these human relations courses is to bring together small groups of executives who live and study as a group for four weeks. Teaching methods range from an out-and-out lecture to a conference-clinic with

everybody pitching in.

One human relations problem recently got the works. The question: What to do in an interview with a top executive who is drinking too much but has many years of seniority and real competence? The problem was first batted around the conference table, then a visiting medico's opinion was obtained, and finally the students acted out the various roles right then and there. ILR faculty members have found, they say, that role-playing has educational value as well as punch.

ILR's extension services help labor unions as well as management conduct labor-relations institutes. The United Gas. Coke and Chemical Workers (CIO) is one of the unions that arranged institutes with ILR this summer. ILR claims to be absolutely

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neutral in labor-management issues, and helps either side improve its knowledge, skills and techniques.

• Smoother-ILR thinks, in fact, that both labor and management are coming to realize that the more that men on both sides of the bargaining table know about labor relations, the smoother and more equitable will be both the negotiations and the administration of the contract.

ILR has sometimes been asked jointly by labor and management in a single plant to set up a program for them on mutual problems, such as foreman-steward relationships or grievance procedure.

Research and publishing is another important phase of Cornell's labor relations school. Bulletins, special studies, and even hard-back books have already come from young ILR's faculty and research staff. ILR also issues a scholarly journal each quarter called Industrial and Labor Relations Review. It has close to 3,000 paid subscribers now.

But trained professional men and

But trained professional men and women are still ILR's prime product. The faculty claims it is graduating a new type of industrial relations man and woman, one who will fit into and contribute to the more mature labormanagement relationship it feels sure America is developing.

## UAW Warns: You Can't Win

Union wars on in-plant gambling with booklet of "facts for suckers," following up earlier moves to keep gambling syndicates from muscling into union.

Anybody who gambles is an out-andout sucker—a would-be sport sure to be swindled out of a substantial part of his paycheck by professional followers of a "heads we win, tails you lose" philosophy.

The United Auto Workers (CIO) is saying that to its million-odd members in a booklet, soon to be released, on the common forms of gambling. Part of its continuing war against in-plant gambling (BW-Aug.21'48,p92). The booklet is intended to show how the odds are always heavily against the "customer" in numbers, horse racing, baseball or football pools, and other forms of plant wagering.

The customer is always wrong if he thinks he stands a chance of coming out ahead, UAW emphasizes; he is dealing with men who believe completely in the W. C. Fields philosophy of "never give a sucker an even break."

• Facts—Fields used that line for laughs but, says UAW, "the way the professional gamblers slant the chances against a player is anything but a laugh-

ing matter."

The union's Secretary-Treasurer Emil Mazey is editing the booklet intended to back up that statement with a careful marshaling of facts—gathered mainly from law-enforcement bodies and now being checked by them. Mazey isn't giving any previews of the odds yet, explaining that researchers haven't arrived at their final conclusions. But he will say this: When the booklet comes out, probably in early October, it should be a highly effective weapon against in-plant gambling—a practical demonstration of the dollars-and-cents hazards of trying to buck the gambling syndicates that have moved into plants.

How successful it will be in cutting into the multimillion dollar annual take of the syndicates is something nobody at UAW international headquarters will predict. They say, flatly, that workers must like to gamble—or they wouldn't do it so extensively that syndicates find it highly profitable to open up in plants.

• Big Business—Almost everyone in labor and management now recognizes in-plant gambling as a big, dangerous operation. A pioneering BUSINESS WEEK survey in 1948 showed that:

• In plants of 1,000 employees or more, an average 10% of production workers consistently gamble in the plant—and upwards of 50% gamble at some time or other. In plants with fewer than 1,000 employees, almost everybody gambles or almost nobody does.

• In-plant gambling is highly organized and operated from the outside; on the average, one out of every 250 cmployees of industry is an in-plant agent for a gambling syndicate—and does his illegal ticket-selling or bookmaking for the syndicate on time that management pays for as working time.

 Generally, at least the lower echelons of management know that inplant gambling is going on and frown upon it, but—for various reasons—never take firm steps to stamp it out.

 Objections—Neither management nor labor objects, particularly, to plant gambling on moral grounds. They have practical reasons for opposing it: Management because it usually means lost time and production, and often poor plant morale; labor because it fears the possibility of union infiltration by gamblers and other undesirables.

UAW adopted a strong resolution against in-plant gambling at its last con-

vention, emphasizing: "When in-plant gambling and rackets exist, there is always the possibility of [their] corrupting the secondary leadership of our union, which can lead to the weakening of our union."

Pointing out that there are "within many plants . . . certain members of our union who are engaged in organized gambling and other rackets," UAW warned that in the future:

 Anyone "engaged in the furtherance or support of organized rackets" will be barred from union office.

UAW will not process "grievances for members . . . disciplined or discharged by their employer for engaging in organized rackets or organized gambling, where guilt has been clearly established."

UAW followed up the resolution by refusing to process grievance cases in a few instances where members were disciplined for gambling, but there is a serious doubt that this policy has put a crimp in plant rackets or wagering.

ing.

Largely for this reason, UAW is now approaching the in-plant gambling problem from another angle, by the booklet giving members the facts of life about gambling.

## LABOR BRIEFS

Unions are worried over layoffs and over the latest BLS reports showing factory hiring at the lowest July rate since 1949, and discharges up. BLS' hiring rate for July was 40 per 1,000 employees in manufacturing plants (in June: 51 per 1,000); the discharge rate was 12 per 1,000. The Bureau says this indicates "a leveling off" in the trend of factory employment.

Severance pay-\$150 for every year of service for up to 10 years is sought by the United Auto Workers (CIO) in contract bargaining with Temco Aircraft Corp., Dallas. UAW also wants aises averaging 30¢ an hour and a new retirement plan for the company's 6,000 employees.

Who asks for aid from the Federal Mediation & Conciliation Service during a deadlocked dispute—the union or the employer? Usually the union, says FMCS. Its latest report shows 73% of all pleas for help came from unions, 14% from management, and 13% from both.

New contract between Greyhound Corp. and its AFL bus drivers' union, covering more than 13,000 employees in 40 states, gives an 8¢ raise retroactive to May 1, and 4¢ more in 1954 and again in 1955—a total of 16¢.

## Atomic Blowup

Labor peace in AEC plants threatened by union plans for organizing, and the end of blanket no-strike pledges.

The militarily important atomic energy industry this week received two warnings that its long truce with labor might be near an end:

Unions served notice that the next major organizing drive—perhaps the biggest since the early days of CIO—will come in that industry, beginning immediately.

AFL's Metal Trades Dept., strongly entrenched in the industry, announced that it will sign no more blanket nostrike agreements at atomic plants.

These developments forshadow a more active unionism in the industry, possible trouble ahead for both contractors and the government.

• Organizing—The International Assn. of Machinists formulated plans for a stepped-up organizing drive in the industry at a conference in Chicago last weekend. Some 200 representatives of lodges (local unions) in 12 states met behind closed doors to exchange information on wages, work conditions, and problems in atom plants.

All apparently had grievances. They

complained that:

An applicant for an atomic energy job "is required to patiently wait an average of 90 days . . . before he can be employed." Then "not only must he undergo regular inspections, wear special clothing and run special risks, and live in isolated and unfamiliar surroundings, he is also called on to sacrifice the only means he has for resolving grievances—the strike—for protracted and unreasonable periods."

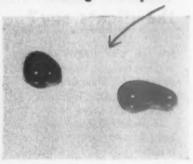
(Workers under the Taft-Hartley act can strike after a 60-day notice to an employer and a concurrent 30-day notice to the Federal Mediation & Conciliation Service; those in atomic encrgy plants must wait 60 days more, or a total of 120, before they are free to strike.)

• Grievances—Representatives of unions have a lot of trouble "gaining access to the worker who has a grievance and in investigating the grievance on the premises," so "protection of the atomic worker's interests [is] more difficult."

worker's interests [is] more difficult."
Restrictions similarly make it hard for a union representative to get "documentation and economic justification for wage and other demands" or to eppose "unilateral and other arbitrary decisions . . . pertaining to the work of employees."

And AEC regulations create difficulties when union representatives try to

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Management Marketing Manufacturing Engineering Industrial Relatio NEW YORK WASHINGTON CHICAGO fight back against "prime contractors operating government facilities [who try to] force wage and working conditions prevalent in their privately operated plants in other industries on the atomic energy workers."

Summing up this discontent, L. P. Siemiller, IAM general vice-president, told conference delegates that none of the problems is beyond solution. All "can be alleviated or at least minimized," he said, by tighter union

policies.

AEC's Position—The Atomic Energy Commission was represented at the conference by two spokesmen—Father Leo C. Brown, of the new Atomic Energy Labor Relations Board (BW—Aug.22'53,p114), and Oscar Smith, director of AEC's Division of Organization & Personnel. Both appealed for continued labor cooperation with AEC's program.

program.

"Conflicts which may have existed between normal collective-bargaining procedures and security of information have, in large part, been resolved," Smith told the conference. "Substantial alignment of employment conditions on atomic energy work with practices in comparable industries has been ac-

complished."

He added that under "agreements providing grievance machinery and assuring that no strikes will occur," lost time due to work stoppages has been held to "approximately 1/100th of 1%." (Heavy losses of time in plant-construction projects are not included in this figure.)

The appeals for continued support of AEC's labor policies got a friendly hearing—but no substantial backing. Delegates chided AELRB mildly for "interfering" in normal labor-management relations, and for "not enforcing its decisions more firmly against operators for atomic-energy plants." They more roundly criticized AEC policies in demanding that atomic-energy workers get "the same benefits that other employees of private industry have."

After that, the IAM conference got down to the serious—and secret—business of mapping plans for the new drive to extend unionization to more

of the industry's workers.

• But Where?—Only two things are known about these plans: IAM's campaign will be backed by a lot of money and manpower, and it will have active assistance from AFL's Metal Trades Dept. and AFL itself.

Where IAM organizers will concentrate first, and how they plan to operate under AEC restrictions, are top secrets in the union files in Washington.

Meanwhile, IAM's announcement of organizing plans was hardly out before other unions in the industry-CIO and even others in AFL-made clear that the Machinists' bid for supremacy in the

field will be challenged. The result may very well be an organizing free-for-all that could disturb present labor conditions in the industry, and might jeopardize—through a flareup of jurisdictional disputes—efforts to unify AFL and CIO.

• AEC Puzzled—Officials in Washington offices of the AEC can't understand what IAM is really aiming at—since, they say, the 150,000 employees in atomic energy (half in construction, half in operations) are almost all union

members.

The only worthwhile targets, it seems to AEC, are the new Savannah River H-bomb project, where AFL's Metal Trades Dept. recently lost a representation election; the project under construction at Portsmouth, Ohio, when it is ready to go into operation; and the chemical plant operated by du Pont at Dana, Inc., where AFL lost an election some time ago.

All other major operations are solidly organized, with AFL having a big edge

over CIO.

 More Plant Pressure?—AEC wonders whether IAM's ultimate interest isn't in giving more active support to workers already organized, rather than in more organizing. Subsequent developments this week in AFL's Metal Trades Dept. seem to bear that out.

John A. Brownlow, president of the department, told delegates to a three-day annual convention in St. Louis (prelude to AFL's annual convention there) that his organization will no longer enter into no-strike agreements

at atomic energy plants.

This policy was formulated, he said, because of experiences under the original Atomic Energy Labor Relations Board—which went out of business last March (BW-Mar.21'53,p168). AELRB resignations, said Brownlow, released AFL unionists from "our no-strike pledge in atomic energy installations." The pledge will not be renewed, even though President Eisenhower has named a new AELRB with Cyrus L. Ching as chairman.

In the future, Brownlow said, AFL's Metal Trades Dept. will accept decisions of the AELRB as binding—and agree not to strike—only if plant operators also agree to accept decisions of the panel as binding. They now frequently do not, he charged, but "conduct their labor relations or other relations with the employees or the government as they see fit, believing they are indispensable and a law unto themselves."

 More Trouble?—The policy—and it must be understood that IAM, as part of AFL's Metal Trades Dept., helped formulate it—could mean more labor relations problems in atomic energy, due primarily to more aggressive unionism.

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# PERSONAL BUSINESS

BUSINESS WEEK SEPT. 19, 1953



The mere fact that you are a business executive doesn't doom you to a peptic ulcer. If you're the "ulcer type," chances are you would get one no matter what job you held.

That's because—contrary to popular belief—ulcers don't limit themselves to executives and professional men. About 10% of the people of the world get them at some time—regardless of occupation, nationality, or race. In all cases, they occur in men four times as frequently as in women.

But most doctors agree on this point: The kind of life an executive leads makes him more vulnerable. High pressure, worry, nervous tension seem to trigger the unknown mechanism which produces an ulcer.

Note that it's only a trigger, however. Work, nervousness, or pressure alone cannot produce an ulcer. There must be the proper physiological cause—namely, an overproduction of hydrochloric acid in an over-tense stomach. Ulcer patients usually have from two to 10 times the normal amount of gastric acid.

Some people apparently always produce an excess of hydrochloric acid. Yet emotional stress, particularly resentment and frustration, cause gastric secretions to rise sharply with everyone.

And once an ulcer shows up, the excessive secretion goes on night and day; calming influences, sedative drugs, and psychotherapy can reduce it only partially.

Most common first sign of an ulcer is persistent indigestion. Usually it takes the form of pain in the pit of the stomach, one to three hours after eating. Any such distress which lasts more than two or three weeks should be investigated promptly—by X-ray.

Peptic ulcers form either in the lining of the stomach itself (gastric ulcers) or in the duodenum (the first part of the small intestine leading out of the stomach). Nine-tenths of all ulcers are duodenal; they never become cancerous. Some specialists doubt if gastric ulcers do either.

It's hard to distinguish between a benign gastric ulcer and stomach cancer. Symptoms are likely to be similar. A good ulcer specialist can usually tell the difference.

Once you get an ulcer, you might as well be philosophical about it. You'll face a drastic change in diet, probably have to give up—or drastically reduce—smoking and drinking till it heals.

And, as things stand now, it's almost sure to recur.

The future may hold brighter promise. There's no real ulcer cure now, but medical research seems confident that it can produce one.

Biggest obstacle is that nobody really knows yet what causes ulcers. Thus it's impossible either to prevent or cure them.

Present ulcer treatment is either surgical or medical—and neither is sure-fire. Surgery normally involves cutting the vagus nerve, which is mainly responsible for production of hydrochloric acid in the stomach. It relieves some patients, doesn't help others; often the after-effects are worse than the ulcer.

So the best hope lies in new drugs being developed. The object of

# PERSONAL BUSINESS (Continued)

BUSINESS WEEK SEPT. 19, 1953 such drugs is the same as in the severing of the vagus nerve—to reduce acid secretions. To do this, the drug must inhibit the passage of nerve impulses which release the chemical asetylcholine, important in gastric acid production.

The Upjohn Co.'s new drug, Pamine Bromide, does this to some extent—with minor side effects, such as dryness of nose and mouth, slight blurring of vision. However, it is far from a cure in the true sense.

Meanwhile, until a cure is found, the goal of every executive should be to prevent an ulcer from occurring. There are no specific rules for that, either—beyond those of good health.

That means moderation in eating, smoking, drinking; plenty of rest, regular hours. Most important of all: Try to avoid worry and nervous tension. Most specialists say that this is the real key.

You'll probably be able to buy a color television set next year. It will cost around \$800, will have a 14-in. picture tube.

That's the word from Dr. W. R. G. Baker, chairman of the national Television System Committee. It's based on the assumption that the Federal Communications Commission will approve this year a color system that's compatible—i.e., one that permits black and white sets to pick up the image, too.

Probably between 50,000 and 75,000 color sets will be produced next year, around 250,000 in 1955, 1.5-million the next year. First sets will all be 14-in. console models; table models won't be out until later, when the price can be cut.

Larger screens aren't likely for a couple of years. Then color sets will probably jump from 14 to 21 in. size. Dr. Baker believes there won't be intermediate sizes as there are in black-and-white.

You can start building or expanding your basic phonograph-record library without spending too much money for something you may not like. Columbia Records has a new label called Entre which sells for nearly 40% less than its Masterworks series.

Record quality is top-grade; the savings in most cases are made through the use of standard repertoire material, already on masters. That saves the artists' costs.

However, three major symphonic works have been newly recorded for this label: Beethoven's Third symphony (Eroica), Schubert's Eighth (Unfinished), and Mozart's 40th. All are played by the Rochester Orchestra, conducted by Erich Leinsdorf. You can get them in long-play, 12-in, albums.

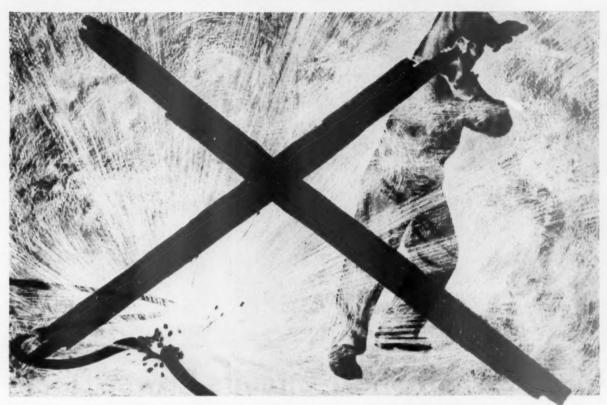
The noisy outboard motor may be a thing of the past.

Both Johnson and Evinrude have announced what they claim to be "quiet" motors. Secret in both is said to be a new "cushion-drive factor" that prevents motor vibration from reaching the hull and converting the boat into a sounding board.

So far both companies are making "quiet" motors in only one horsepower range. Johnson's is 5½ hp.; Evinrude's is 7½. Price is only a few dollars more than for the "noisy" equivalents.

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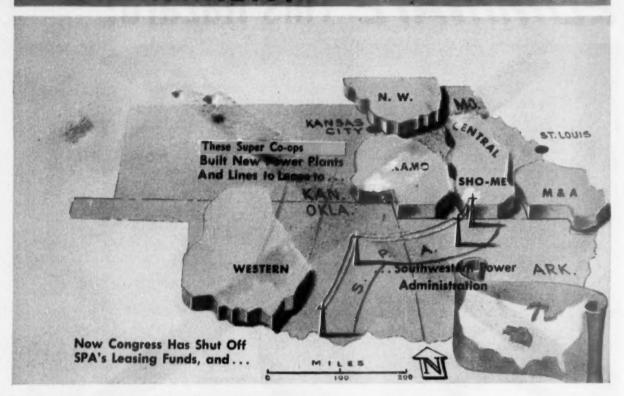


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# GOVERNMENT



# Policy Switch Short-Circuits Power Deal

In Missouri and Oklahoma, six groups of farmer electric cooperatives—the so-called "super co-ops"—are busy trying to work their way off a limb Congress left them on at the end of its last session.

• Policy Switch—On July 29, just before it adjourned, Congress voted to prohibit the use of government funds to carry out a number of contracts involving the six super co-ops, the Southwestern Power Administration, and the Rural Electrification Administration.

One set of the contracts, signed in 1950, allows the co-ops to borrow about \$55-million from REA to build new power plants and transmission lines to feed co-op distribution systems. Under another set, SPA arranged to lease the new plants and lines for 40 years, at a rate sufficient to pay off the REA loan to the co-ops. At 'the end of that period, SPA would take them over.

Congress' move doesn't affect the

Congress' move doesn't affect the REA loans; these have been cleared and are not now subject to withdrawal. What Congress has done is to shut off funds with which SPA was to pay the co-ops under the lease contracts. With a bunch of new facilities completed or under construction, that leaves the co-ops holding the bag.

• Turn of Events-Their problem shows up more clearly when you look back to the history of the contracts. In 1950, the Southwestern Power Administration-the agency of the Dept. of the Interior that markets power from the Denison hydro dam set between Texas and Oklahoma, and the Bull Shoals and Norfork dams in Arkansaspressed Congress for funds to build new power lines and steam plants. In the Southwest, hydro power is limited by water flow and SPA was looking for a way to assure year-round firm power for its customers. Congress refused, instead instructed SPA to sign "wheeling" agreements with private utilities, under which the utilities carry power from the dams to government customers, and fill in, when the hydroelectric power runs short, from their steam generators.

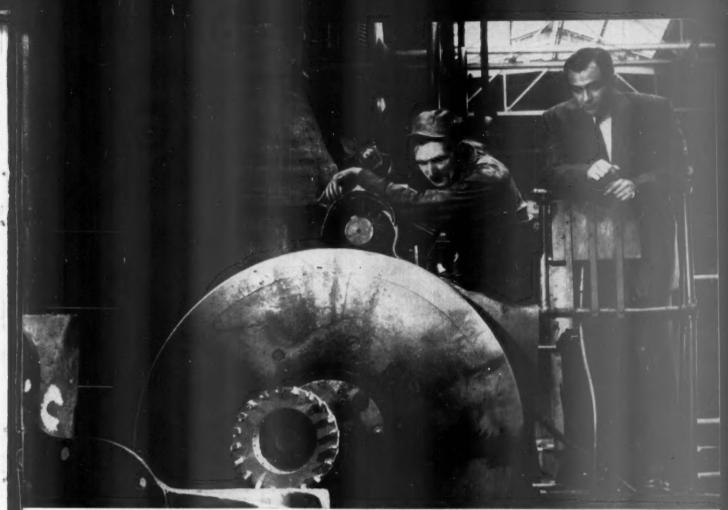
Meanwhile, SPA began to negotiate with REA and the rural electric cooperatives nurtured on REA loans. It wanted a setup whereby it could firm up its power supply by leasing steam plants and lines built by groups of cooperatives, and sell them back power they needed for customers. With this sort of network, SPA figured it could control its power more effectively,

shuttling it over lines where needed.

The co-ops stood to gain, too. Along with providing firm power around the clock, this sort of setup linking steam and hydroelectricity makes it possible to run the co-op's plant on a full-time basis for its own customers and SPA, and get the most economical use out of the plant. And the co-op is assured of a relatively low rate for the power it buys from SPA.

· Opposition-Only outfits that didn't stand to gain were the private companies. By 1953, they had challenged the contracts in two separate suits. SPA won one and lost the other. The Arkansas Supreme Court this year ruled out a permit allowing a co-op to build a 30,000-kw. steam-powered generating plant on grounds that the state law authorizes co-ops to sell power to members only, and that SFA had no legal right to purchase power on this scale to firm up its supply. In a second case, a District of Columbia court of appeals this summer ruled against claims of private power companies that SPA contracts with four Missouri co-ops were illegal, and that Congress had not appropriated funds for such deals.

Then, just before Congress adjourned, the Interior appropriations bill



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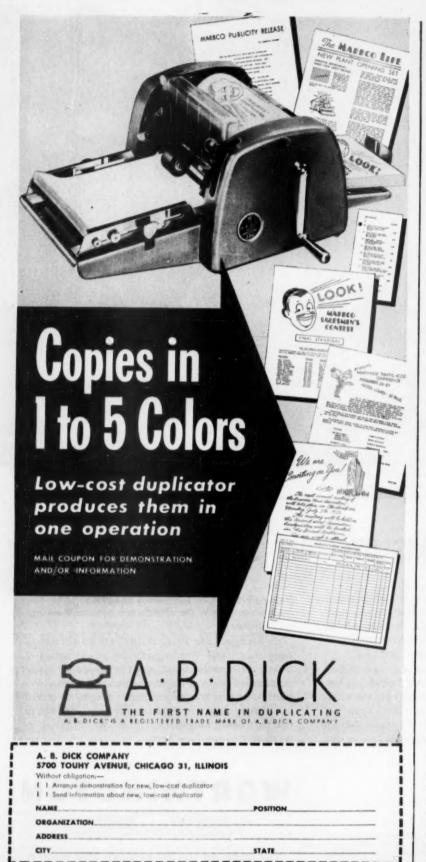
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"... SPA turned the lines back, leaving the companies to fend for themselves ..."

POWER starts on p. 186

went through denying SPA funds for such activities.

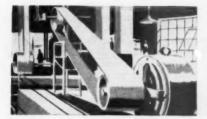
• SPA's Spot—Congress' action momentarily stunned the co-ops. SPA had already taken over several completed transmission lines and segments of transmission lines of three of the co-ops—Central Electric Power Cooperative, Jefferson City, Mo., Sho-Me Power Corp., Marshfield, Mo., and Western Electric Cooperative, Anadarko, Okla. It simply turned the lines back to them and recalled all its service crews, leaving the companies to fend for themselves as best they could.

Douglas G. Wright, head of SPA, says the agency is now negotiating with all the co-ops to try to reach an interim agreement under which it would pay certain wheeling charges to the co-ops to move SPA power over their lines, and use a fund set up for the outright purchase of power it might need from the co-ops. The fund expires Feb. 28, 1954. By that time, the agency hopes some way will be found to clear up the mess by getting up new working agreements that will satisfy Congress, the co-ops, and SPA. If not, the co-ops will have to go on their own and try to operate like private business companies.

• Co-ops Plight—That's just about what's happening right now to the three co-ops most immediately affected—Central, Sho-Me, and Western. Central and Sho-Me, which have a contract to use the same SPA power line, have gone out and purchased equipment and set up their own maintenance and operating forces. Central is making temporary agreements to buy hydro power it needs from SPA. One problem is that the company is still paying rates at the dam that were based on servicing of the lines by SPA. Unless rates are adjusted downward servicing by co-ops will mean raising customer rates.

Western is in a similar spot. It sums up its situation by saying it will make every effort to "operate our own power company."

The three other co-ops involved—N. W. Electric Power Cooperative, Inc., Cameron, Mo., Kamo Electric Cooperative, Inc., Vinita, Okla., and M&A Electric Power Cooperative, Poplar Bluff, Mo.—find themselves in somewhat different positions. Northwest and Kamo, which have contracted to use the same power line, were not vet in operation. Northwest figures the REA-financed facilities will be ready sometime in the fall. The companies



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STEEL STRAPPING

are now putting their stress on working out an interim arrangement setting new rates for buying power at the dam. "All we want to buy is hydro power and we will operate strictly as a utility," says a Northwest spokesman.

M&A won't be directly affected by the lease cancellation. Its arrangement with SPA called for a direct interchange of power, with M&A buying from SPA and selling SPA some off-peak power.

• Determined—Some of the companies are hopeful that the picture will be changed when Congress meets again. Most of them take the view that the government is under obligation to live up to its contracts, and they intend to put up a fight.

On one point, the co-ops are unanimous: They are dead set against selling out to their rivals, the private utilities.

# Housing Outlook...

... shows the effects of the tight mortgage market. But the government has two schemes to loosen things up.

If you try to describe the outlook for housing next year, you have to arrange your predictions around four main facts:

• Albert Cole, chief of the Federal Housing Administration, is back in Washington after a nationwide tour of shirtsleeve conferences with builders. He predicts that housing starts in 1954 may run to about 900,000. Starts this year are expected to total over a million (BW-Jul.25'53,p29).

 Builders' plans are being hampered by tight money. But the Administration has no intention of lowering FHA's down-payment requirements on new houses in the immediate future.

· On the other hand, financing may be eased by the trade-in plan worked out by FHA and the National Assn. of Home Builders (BW-Aug.1 '53,p27). This plan was tried out first in several test cities, and last week was broadened to cover the entire country. Under its terms, a homeowner can use the equity he has built up in his old house as down payment on a new one. FHA insures the mortgage on the old house, now in the builder's hands. With FHA's commitment, the builder can borrow money to renovate the old house, and-so the theory goes-put it back on the market and sell it at a profit.

• Financing may also be eased by the "one-for-one" plan (BW-Jun.27'53, p64) of Fanny Mae-the Federal National Mortgage Assn. This plan has been operating successfully for a month. It provides that a builder who buys a

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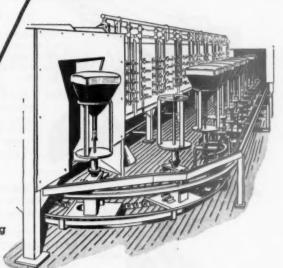
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"... not to start projects for which they don't have firm financial commitments . . ."

HOUSING starts on p. 190

certain amount of mortgage paper from Fanny Mae can get, in return, a Fanny Mae commitment to buy, later, the same amount of new paper from the builder. With the commitment in hand, the builder can borrow money and start putting up houses. He can liquidate the old mortgages he bought from Fanny Mae by selling them at a discount. The net effect is to give the builder the credit he wants-at a somewhat higher interest cost than the rate shown on the mortgages.

• Tight Money-Cole's estimate of the outlook for new housing jibes with the latest private figuring of other government and private housing officials in

Washington.

The economy could still absorb a million new homes in 1954, Cole says, but builders would have to shift their production into parts of the market that are not now fully served—especially the lower end. In Cole's judgment, most of the home builders won't reorient their operations quickly enough to take care of the people who need housing most. There are too many obstacles in the way-not the least of them being the financial hurdle.

Tight money is already constricting builders' plans. Executive director John M. Dickerman of the National Assn. of Home Builders has advised his 26,000 members not to start any projects "for which they do not have firm (preferably written) financial com-

mitments."

• Trade-in-But money tightness is not rushing builders into using the recent NAHB-FHA house trade-in gimmick to ease the sale of new homes. A onemonth test of the trade-in program in picked cities saw only a few applications made to FHA. As long as most builders can sell new houses without resorting to FHA aid on trade-ins, they aren't going to take the time to learn the possibilties of the trade-in program.

Last week FHA mailed instructions to all of its 74 insuring offices, telling them to give builders everywhere in the U.S. the same advantages previously offered the test cities. All FHA offices now have the details of the "dual commitment" feature, that enables a builder to finance improvement of a property

taken in trade.

This wrinkle is the heart of the new plan. The home builders and FHA aim to do more than utilize trade-ins to facilitate new house sales; they also want to modernize and improve the old houses turned in as equity on new home



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## "... has offered no incentive for improvement of the older houses . . ."

HOUSING starts on p. 190

purchases. The so-called dual commitment protects the builder in this venture. It binds FHA to insure a mortgage loan on the improved property, even if the builder can't find a buyer and has to keep the renovated house himself. With this commitment in hand, the builder can borrow money from a bank to finance the improvements; his own money is not tied up in the operation.

• Restrictions-There are limits, of course, to the FHA insurance. For example, the total mortgage may not exceed \$10,400; and the builder must plow back into the cost of renovation any down-payment cash he receives from the trade-in buyer of the new

Nobody knows whether these regulations will hamper the spread of the new trade-in device. The mortgage limitations on old houses-improved or unimproved-stem directly from present laws. Increases in the loan-value ratios for FHA-insured mortgages on existing houses were discussed with Congress this spring, but the proposals were sidetracked.

· Incentive-Trade-ins of one sort or another are an old story to real estate brokers and to builders. And FHA has always done a big business in insuring

loans on existing houses.

But this kind of FHA financing-like the more common conventional mortgage lending on existing propertieshas offered no incentive for improve-ment of the older houses. The new trade-in deal supplies such an incentive.

Both builder and FHA agree that promotion of the new gimmick must come from NAHB and its local chapters. The home builders talked up the plan originally, and FHA went along to give it a trial. That's part of the policy of FHA's officials; they believe that the industry should cook up its own selfhelp ideas and that FHA should cooperate up to limits of law and government policy

· Other Tools-Trade-ins are just one kind of tool in the government's kit to fight any serious slump in construction of new houses. If things really got rough, President Eisenhower could lower FHA down-payment requirements to a minimum of 5% on more than \$12,000. He could also extend FHA allowable properties costing no mortgage maturities on these houses

to 30 years. Housing officials and government economists have made a thorough study





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Already the printing, paint, and food industries are studying possible applications of the new lamp. If it gives you an idea for some product or process improvement that the right kind of glass might help you accomplish, we'll be delighted to work with you.

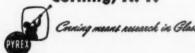
Meanwhile, you'll find much of interest in the new 48-page illustrated booklet, "Glass and You." It tells about products improved or made possible by glass. Mail the coupon.



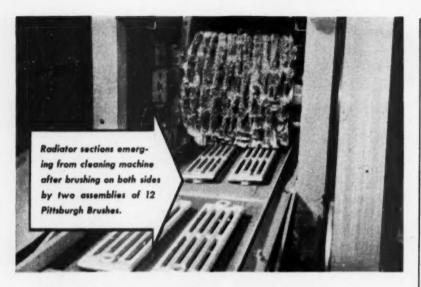
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The April-May issue of the "Corning GLASS-MAKER" tells more of the VYCOR story—and more about the heat lamp, too. We'll be glad to send you a copy.

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**Preparing Chills**—At Continental Foundry & Machine Co., East Chicago, Indiana, chills used to cast iron rolls must be cleaned of the oxydized metal remaining from previous usage, as well as dirt and grease accumulated in storage. After experimenting with other brushes, Continental settled on Pittsburgh Brushes because they "do the job better and stand up longer than any others previously used."

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of the possibilities wrapped up in this discretionary power, which Congress handed the President in the housing amendments of 1953. Officials have decided against any early use of the power for several reasons. The compelling reason, as they see it, is that a tight mortgage market is the basic cause of the nationwide difficulty in financing new houses. Lowering down payments would not draw any additional investment capital into the money market. The act would merely serve to increase the demand, which already equals or exceeds the supply.

• Statement—Cole dwelled on this point in a statement he made last week for Engineering News-Record, a McGraw-Hill magazine. He emphasized that federal officials will move cautiously in taking any such action.

• Lever-Cole came back to Washington from his round-the-country conferences with a very solid impression that tight money is a real obstacle to mortgage financing. How to loosen things up? One way—to expand Fanny Mae's one-for-one operations.

Congress originally set a limit of \$500-million worth of mortgages for this purpose. If one-for-one business continues at its present pace, Fanny Mae's \$500-million revolving fund will be reduced to nothing before Congress gets back to Washington. The legislators could then raise the limit if they saw fit. Fanny Mae has in its portfolio another \$2-billion of mortgages that can be turned over to the one-for-one fund if necessary.

## Set-aside Contracts for Distressed Areas

A controversial government procurement policy designed to put Defense Dept. business into labor surplus areas has gone by the boards. Objections from defense contractors in other areas –and their congressmen—made the policy too hot to handle.

This week, the Office of Defense Mobilization was working up a new scheme it hopes will be more politically palatable.

• One-tenth—Under the old program, companies in labor surplus areas were allowed to match low bids on defense orders made by other companies, then take the orders away from them. Over \$53.3-million worth of business was placed this way. Actually, that's less than 10% of the total defense contracts in labor surplus areas. But more than half of the companies that were aided by the program were small business.

The policy, which went into effect in March, 1952, had been a boon to many hard-goods producers in places like Providence, Terre Haute, Scranton,



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Export Executive experienced all phases exp-imp with flexible progressive approach to problems of foreign trade, desires position with estab-lished manufacturing firm seeking to enter for-eign markets or stimulate export sales, PW-9176, Business Week.

CPA-Age 30 now controller for nationwide busi ness desires change. Well experienced in all phases of accounting and federal and local taxes. PW-9169, Business Week,

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Lawrence, Mass., and 37 other communities where at least 6% of the labor force was unemployed.

The policy affected contracts awarded through negotiation-which makes up the bulk of Defense Dept. procurement. It did not apply to competitive bidding on shelf items. Other rules: (1) Contracts had to exceed \$25,000; (2) the labor surplus area contractor's first bid must have been not more than 20% higher than the original low bid. • Set-aside Basis-The plan now under

consideration would be on a set-aside basis, similar to general preference schemes now helping small businesses and textile companies in labor surplus areas. Here's how it would work:

Bid-matching would be tossed out, and with it the touchy practice of taking contracts from one company and awarding them to another. Instead, any big defense procurement program would be chopped in two parts—the bulk to be awarded by standard negotiation or competitive bidding, the smaller set aside specifically for companies in labor surplus areas.

The first part would be to let to lowest bidders as usual. Labor surplus area contractors who match that low bid would then be awarded the contracts set aside for them.

There's bound to be opposition even to this milder scheme. But its advocates are ready to bring the issue straight to President Eisenhower, and they are quick to show that he pledged to keep the preference policy in distressed areas (during a campaign speech last year in Lawrence).

· Senate Fight-The old policy was scrapped last month, soon after a bitter Senate fight on the issue, during consideration of the Pentagon's appropriation bill for fiscal 1954. Despite the opposition of New England senators, a rider was pushed through by Southern ers and Westerners banning the award of military contracts "for purposes of correcting or preventing economic dislocations.

In the Congressional rush to adjourn, the rider was watered down to a simple ban on the use of price differentials to aid labor surplus areas. This really didn't mean much, since, while ODM's manpower policy program provided for such payments, defense mobilizer Arthur S. Flemming never planned to use them.

With adjournment almost stalled over the preference issue-which critics said was turning the defense program into a "wholesale WPA"-Sen. William F. Knowland (R., Cal.), the majority leader, promised to go to the President for "administrative action" on the policy, to please the critics dissatisfied with the modified rider. ODM interpreted Knowland's remark as a "mandate to revise the policy."

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# Incredible-But Valuable

Despite its suddenness, the resignation of Martin P. Durkin as Secretary of Labor had about it the air of inevitability. When his appointment was first announced, the late Sen. Robert A. Taft characterized it as "incredible." So it has proved, because it illustrates once again the truth that in our two-party democracy, no man can long hold cabinet rank when his basic political philosophy differs from that of the executive

who appointed him.

To his credit Durkin never misrepresented-or departed-from his basic political beliefs. It was his clearly stated view that the Taft-Hartley act should be transformed through "liberalizing" amendments. A political unknown before his appointment, his dignified behavior while in office, and especially in leaving it, has gained him well-earned prestige. His calm statement detailing his reasons for quitting is distinctly different from labor's past attitude, which has been featured by emotional hysteria rather than common sense.

Beyond this, he has performed a valuable public service by bringing out into the open the simmering dispute over Taft-Hartley. His stand has served to dramatize and clarify this thorny issue. He has confronted the Administration with the necessity of rethinking its ideas and restating its views. This should be done without

ambiguity, and it should be done soon.

# After Victory

Chancellor Konrad Adenauer's triumphant election victory marks the beginning of a new era in Germany. For the first time, the German people have decisively aligned themselves with the West. For the first time, too, a democratically chosen government has gained an absolute majority in the legislature, which insures a strong and stable administration for the next four years (BW-Sep.12'53,p160).

The United States has played an important role in this triumph. Acting in the belief that a strong Germany would serve as an imposing bulwark against Communism, we helped bring the country back from the debris of war to a healthy, thriving position. In fact, Germany is once again the dominant power in Europe. But this time it is a valuable ally rather than a feared enemy.

This is our reward. We have been instrumental in seeking Germany's integration with the West, and the election result shows the Germans strongly support this aim. But though we may feel entitled to share in the victory, it is important to recognize that the honors really belong to Adenauer and the German people. With Germany resurrected, literally from the ashes, and with his countrymen behind him, Adenauer has emerged as a political figure of great stature. He must be listened to as we listen to Churchill-as an independent and respected ally who shares the same basic principles but whose views are indubitably his own.

We must respect Germany's independence, and the Germans, in turn, must realize that their return to power in Europe carries with it heavy responsibilities. To gain friendships commensurate to their power, they will have to show infinitely more restraint and tact in dealing with their European neighbors than they ever have displayed in the past.

The best evidence that the Germans recognize the importance of their role is in the election of Adenauer. His impressive record to date is definite reassurance that there will be a new and fruitful relationship be-

tween Germany and the West.

## For Better Government

The government's civilian payroll decreased by 127,-124 during the fiscal year that ended last June 30. Since then additional cuts in personnel have been made. There have been cries of protest about this job slashing, but the Administration has wisely ignored them. It has reasoned that the payroll must be decreased if economy is to be effective. By sticking to its guns, the

Administration ought to make real savings.

What would be wrong is if efficiency suffered in the interest of economy. Yet that appears inevitable. The cuts in personnel have been made-and could legally only be made-within the framework of Civil Service rules. That means, among other things, that those last hired were first fired; that a complex priority system (including such factors as seniority and veterans preference) has caused quite a bit of shuffling inside government agencies; and that an individual's personal abilities hardly ever decided whether a man or woman was fired, kept, promoted, or demoted.

In principle, the Civil Service system is sound, because it replaced a discredited spoils system that put government jobs almost entirely at the price of political expediency. But Civil Service is not designed to put and keep the best man in a given job. The last Administration was able to "blanket in" a goodly number of party faithfuls into the civil service; with ten to twenty years in government, these appointees are studded with seniority points and cannot be wrenched off their jobs under the present set-up.

We are not, as yet, getting a better government service. It is going to be a lot harder to increase personnel quality than it is to reduce sheer quantity.



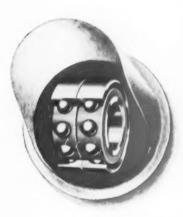
# at the crossroads...

Today many parts are precision ground to a ten thousandth tolerance almost as fast as your watch can tick. But there was a day, not long ago, when it appeared that industry must choose between high-speed production and precision grinding.

As industry stepped up machine speeds, to hold down production cost, the trouble began. Existing "precision" ball bearings couldn't hold a spindle in line at accelerated speeds, some up to 100,000 r.p.m. and better.

To meet the demands of machine tool builders for positive spindle rigidity, Fafnir developed Super-Precision Ball Bearings. They permit no deviation of the spindle at top speeds . . . mean a longer, accurate life for the machine, and lower operating cost.

This is another example of the Fafnir "attitude and aptitude" for solving bearing problems. It's a way Fafnir has of looking at bearings from the user's point of view . . . a demonstrated ability to come up with the right bearing for the need. This "you" approach to ball bearing design may be just what you need. Fafnir's experience, remember, is over 40 years long — and industry wide. The Fafnir Bearing Company, New Britain, Connecticut.



Fafnir Super-Precision
Ball Bearings made to
highest industry approved
tolerances. Pairs of these
bearings are so carefully
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